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PROCEEDINGS

OF THE

National Conference

OF

State Boards of Health,

HELD AT

CINCINNATI, OHIO, MAY 4, 1888.

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1532 PINE STREET, PHILADELPHIA.

BENJAMIN LEE, M. D.,
Secretary.

PROCEEDINGS

OF THE

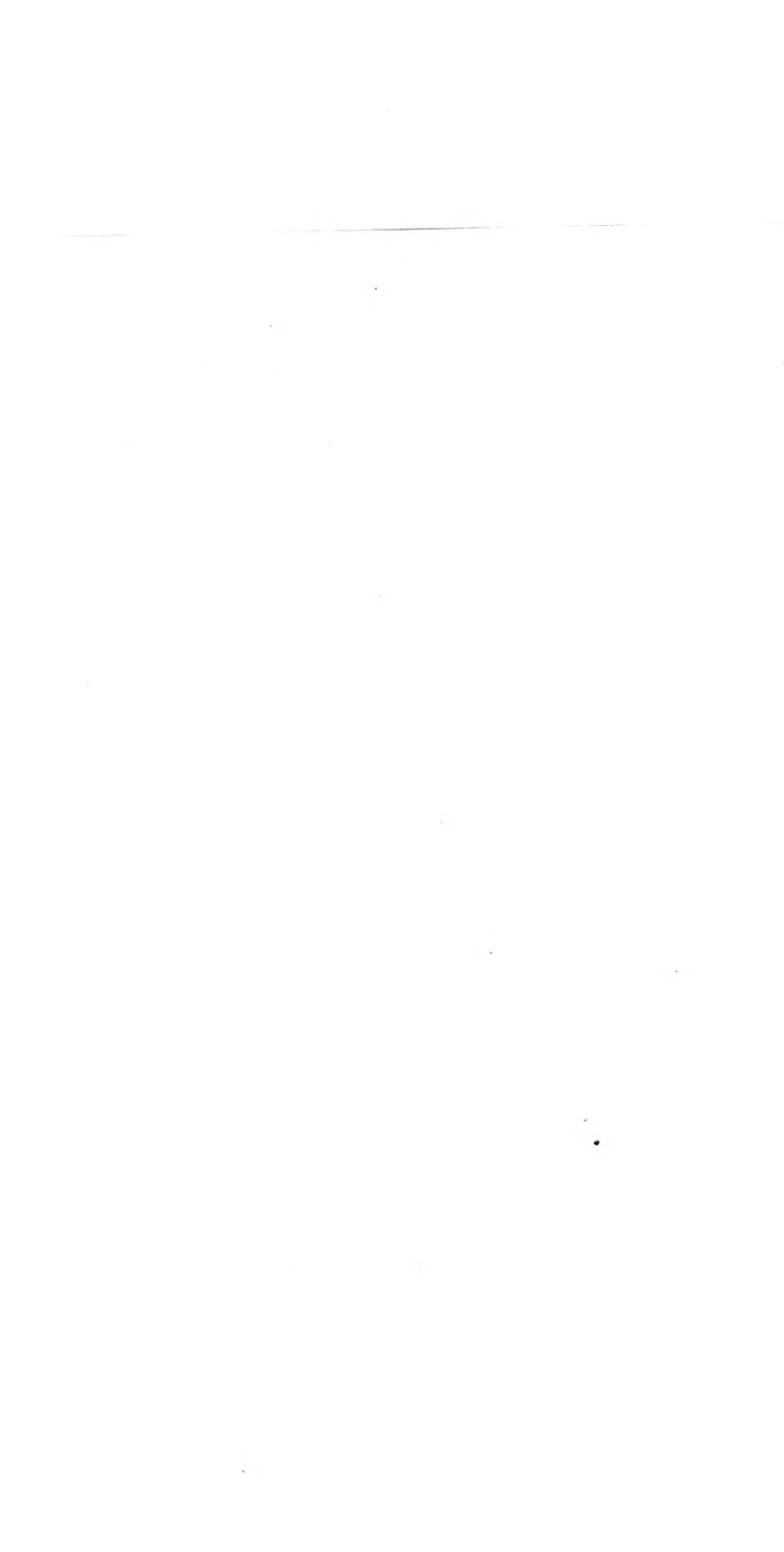
National Conference of State Boards of Health.

Held at Cincinnati, Ohio, May 4, 1888.

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The president directed the roll call of states, which was as follows, viz :

Alabama.
Arkansas.
California. Dr. H. S. Orme.
Colorado.
Connecticut.
Delaware.
Florida.
Georgia.
Illinois. Dr. John H. Rauch, Dr. R. E. Starkweather.
Indiana. Dr. S. R. Seawright, Dr. W. A. Fritsch, Dr. S. S. Boots,
Dr. John N. Taylor.
Iowa. Dr. P. W. Lewellen, Dr. J. F. Kennedy.
Kansas. Dr. W. L. Schenck, Dr. J. M. Welch.
Kentucky. Dr. Pinkney Thompson, Dr. J. N. McCormack.
Louisiana.
Maine.
Maryland.
Massachusetts.



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Louisiana.

Maine.

Maryland.

Massachusetts.

Michigan. Dr. Henry B. Baker.
Minnesota. Dr. C. N. Hewitt.
Mississippi.
Missouri.
New Hampshire.
New Jersey.
New York.
North Carolina.
Ohio. Dr. John D. Jones, Dr. C. O. Probst.
Pennsylvania. Dr. David Engelman, Dr. Benjamin Lee.
Rhode Island.
South Carolina. Dr. James Evans.
Tennessee. Dr. J. Berien Lindsley.
Texas.
Virginia.
Vermont. Dr. C. L. Allen.
West Virginia.
Wisconsin. Dr. J. T. Reeve.
District of Columbia.
Dominion of Canada.
Province of Ontario. Dr. P. H. Bryce.
Province of Quebec.
Manitoba.

The president, Dr. J. N. McCormack, then read an annual address as follows, viz :

GENTLEMEN OF THE CONFERENCE : As ours is a semi-official organization, met to discuss questions previously submitted by a state board of health in regard to problems which have arisen or are likely to arise in official work, I have not thought it necessary during the three years you have honored me by making me your presiding officer, to consume your time in listening to an annual address. I shall not now deviate from this custom, but there is one question of the greatest importance to us as executive officers, and of interest indeed to every citizen of the country, to which I desire to ask your earnest attention at the outset of your labors.

In the face of the danger of an invasion of Asiatic cholera during the present year the inefficiency of the quarantine appointments at the port of New York is a menace to the whole nation. After four years of warning the health officials of that great port were unprepared to deal with cholera-infected ships last year, and although the danger still continues no adequate efforts have been made to conform the quarantine defenses to the present advanced state of sanitary science, although the defects have been fully recognized and admitted by the highest professional and official authority, and a quarantine bill without sufficient available means has recently passed as a sort of

compromise measure. The information comes to us from apparently reliable sources that the whole difficulty in securing such legislation, appropriations and administration as will give adequate protection at this port are of a political nature and that this difficulty is likely to continue.

Whatever may be the cause of the neglect there can be little question but that its existence imposes grave responsibilities upon each of us who are made by law the health guardians of the people of our respective states. While the political leaders of New York are, as we think, in their greed for power and spoils shamefully abusing a great public trust in this regard, we should consider the means at our command to limit the disease to this one state if it be possible to do so. The majority of our boards are entrusted with large quarantine powers as against diseases of this class, and it appears to me that one of the most important duties before this conference is to arrange for that concert of action in regard to the administration of these laws, should the occasion arise, as will give the least interference with commerce consistent with the proper protection of our people. Any plan of action agreed upon by you will, of course, be well considered and conservative, but it is more likely to be so if arranged for now than if separate action be taken by the respective boards during the panic and popular clamor attending the actual presence of an epidemic.

I make no reference to the threatened danger from yellow fever and small-pox because action relating to the prevention of these diseases is contemplated in the questions formally submitted in the programme.

Dr. Thompson moved that a committee of three be appointed to take into consideration the suggestions made by the chair and report on the same.

The motion was adopted.

Dr. P. H. Brice, member of the Board of Health of the Province of Ontario, read a paper on "The duties of the conference in urging the erection of isolation hospitals for treatment of infectious diseases (as scarlatina, diphtheria, etc., as well as small-pox), as a more economical and effective method than placarding houses and quarantining families where these diseases are present." Proposed by the Provincial Board of Ontario.

Isolation Hospitals.

To the President and Members of the Interstate Conference:

GENTLEMEN: While doubtless the special province of this conference is the discussion of those matters which relate more especially to the coöperation of state boards and port and federal authorities with regard to the notification of infectious diseases rather than to

internal state measures which may be in operation for limiting any kind of diseases, yet as the question of notification of diseases would be largely wanting in practical good if not followed by effective measures for dealing with outbreaks when they do occur, I have not deemed it foreign to the work of the conference to introduce for discussion the subject which has been assigned me in the programme.

Hospitals for infectious diseases date from a century ago when they were instituted to supersede in England the so-called pest houses of a former time, redolent of memories of the plague both there and in continental countries.

Their utmost design was to assist in the better treatment of cases of diseases, in those cases where the conditions of houses and families made either isolation or satisfactory treatment of diseases impossible, hence being called sometimes by the euphemistic term houses of recovery, which title may perhaps, with advantage, be still applied to them. Except in a few instances, as at New York, Grosse Isle, etc., the idea of existing isolation hospitals for diseases other than small-pox is for this generation a new one. In these places cholera sheds and typhus or fever hospitals have been known, but with the rapid transit of the ocean steamships, which carry almost all immigrants, and with increased knowledge of disease, cholera and typhus hospitals have almost passed into the limits of forgetfulness, and it is only recently, with the endemic prevalence of diphtheria and of localized epidemics of scarlatina and measles, that municipal authorities have, through the failure of notification with the ordinary placarding methods in effectual limiting outbreaks of these diseases, bethought themselves of the principal so rapidly extending in Britain of having municipal isolation hospitals for these diseases, which are becoming as scourges in the sum total of their effects upon the population of this continent.

Since fever hospitals of London began in 1862, and Gairdner's of Glasgow at the same time, which proved such signal successes in stamping out epidemics of typhus, the idea of isolation hospitals has there greatly grown: since in London it was then shown that while of the inmates only one in three hundred and forty six contracted typhus in those hospitals when typhus was treated separately, there were when treated within same wards as other fevers one in every forty patients who had been admitted to be treated for other fevers who thereafter took typhus.

The idea of separate hospitals was extended when cholera broke out in 1866. Since then the principle has grown till now over 300 sanitary districts out of some 1,500 have provided hospitals of some kind or other. In New York we find that the principle has been largely adopted, there being in the East river a small-pox and a typhus

hospital; also, on East Sixteenth street a hospital for scarlet fever, diphtheria and measles, and a reception hospital. All diseases, except cholera and yellow fever under the charge of the port authorities, are under the charge of the city board of health. The hospitals are connected with headquarters by telephone, and a steam launch is, I understand, provided for the use of the board.

At Grosse Isle in the St. Lawrence separate hospital provision is made for cholera and typhus, at one end of the island separate from the hospital which is available for other diseases at the other end of the island. If under the circumstances of the cities referred to such isolation hospitals have been proved both a necessity and benefit it is fair for us to enquire whether the principle is not and ought not to be more widely applicable. In Canada and I take in the United States, the laws provide for the erection wherever municipal health authorities deem it necessary isolation hospitals, and in Ontario the provincial board has power to make the erection of such compulsory when contagious diseases prevail in municipalities. Hitherto, however, the isolation hospital has existed so specifically for small-pox that generally it has been known as the small-pox hospital or even pest house, while in any cases as in our larger centers where infectious diseases have been treated outside of these houses, it has been in the wards of our general hospitals. While under exceptional circumstances isolation in the case of private houses may be possible yet as a measure intended to deal with the whole question before us it is manifestly inapplicable. What in my experience has become an absolute necessity, if we propose to deal with the constantly recurring outbreaks of diphtheria, etc., is to have hospitals either on the pavilion principle, or separate cottages erected and maintained in every larger municipality and conveniently for several contiguous township municipalities, where all cases which the medical health officer deems necessary can be removed to immediately after notification, if a child with its mother or sister as nurse, there to be treated until well. In the smaller municipalities by the family physician if no regular town physician exists, until well. At the time of removal the house can be inspected and disinfected, the family while not quarantined kept under observation till the period of incubation be past and the wage-earners after a thorough first disinfection be allowed to attend to their daily duties. Many details, various in their character, according to circumstances would have to be introduced but what we have enunciated is the general principle. I shall conclude this portion of my report by a statement of the advantages incident to such a system.

1. It makes the *raison d'être* for notification evident, and throws the onus of responsibility on the family physician and householder, should disease spread from the house as a center.

2. It throws an equally great responsibility on the health depart-

ment, if after notification other cases occur in a house either through neglect of immediate inspection of premises and providing local conveniences for isolation of first cases.

3. It supplies an argument for better house isolation since the responsibility of the house isolation, proved by no other cases occurring, is upon the householder, for should other cases occur he cannot fairly object either to a quarantine of the household or to a removal of all existing cases and a thorough disinfection.

4. Should house isolation prove a failure then the health authorities have public sentiment in their favor in enforcing the general provision for removal of all first cases.

5. It does away entirely with the opprobrious, vexatious and useless methods of placarding, since the method is unnecessary where after a statement of the requirements of the law, householders willingly remain quarantined, or useless, for if a patrol be required by his presence to enforce quarantine, then the placard is superfluous.

6. It is in the highest sense humanitarian and economical. It is in many instances absolutely impossible for the mother of a large family to nurse *e. g.*, a case of diphtheria, and attend to the many other household duties.

7. It is cruel to permit a poor family to be with an almost certainty afflicted in all its susceptible members with a disease so fatal, and it is unjust and absurd to expect a wage-earner to be prevented from earning the necessities of life, while with almost absolute certainty house quarantine will extend the area and period of sickness, inflicting as well unnecessary doctor's bill and a tolerably certain undertaker's levy.

Allow me to quote but one remark taken from numerous others in the local government's report 1880-1, S. B. on this subject. Says Dr. T. Wright, then health officer, Chiltenham, in his annual report 1880: "During the last six years small-pox has been introduced into the town on twelve separate occasions by cases which were imported from infected districts, all these patients I received into the Delancey Hospital as soon as they were discovered, and in each case the disease never extended beyond the house in which it occurred. Similar testimony is also borne as regards the isolation of scarlet fever patients."

The bearing of this subject on the question of interstate notification is obvious, for I take it as an axiomatic fact that interstate notification becomes easy in proportion as it becomes unnecessary. In other words my friend Dr. Rauch, from Illinois, will have no qualms of conscience in filing my notification of a case of small pox in Ontario, and simply acknowledge it when he knows that the case has been promptly and effectually corralled. But if I have doubts as to the efficiency of internal measures, in other words of municipal promptness in dealing with cases of contagious diseases, I naturally

would hide it from my neighbor, Dr. Baker, for fear he might apply the retaliatory clauses of the Fisheries' Bills and obstruct interstate communication. What I want to feel and what I take it every state officer wishes to feel is that internal municipal as external or port notification and isolation of cases of infectious diseases is thorough in neighboring states as also in his own and then interstate notification becomes a broad national pleasure as well as a duty, at the same time that it has become from the practical standpoint, proportionally unnecessary.

At the conclusion of Dr. Brice's paper Dr. C. O. Probst, of the State Board of Health of Ohio, said:

MR. PRESIDENT: I fully agree in the opinion that isolation hospitals for infectious diseases would afford a more effective method for limiting their spread than by placarding and quarantining houses as it is usually done. In so far, also, as it would lessen the number affected by these diseases it would prove a more economical method. But I am not prepared to say what should be the duties of this conference in urging the erection of such hospitals. If the conference simply desires to put itself on record as having advocated an advanced sanitary measure for the restriction of infectious diseases I would favor a resolution to that effect. It might even be well for state boards to agree to recommend in their respective states the erection of such hospitals. I feel sure, however, that the matter could go no further at this time in Ohio. We have in our state a law covering this question, boards of health may erect hospitals for infectious diseases and may remove thereto patients so affected and use all necessary means to retain them there, but no one has thought of adopting such measures in any but the pestilential diseases. In the majority of instances it would be impossible, in my opinion, to carry out this law in regard to scarlatina, diphtheria, whooping cough, etc.

In our largest cities it would perhaps be different. Here, among the poorest classes, where such diseases usually rage most severely, and with whom quarantine measures are with such difficulty enforced, they would undoubtedly be of the greatest value. And it is perhaps true that under such circumstances the parents of children affected with infectious diseases would not only willingly, but often gladly see them removed to hospitals for treatment. We do not doubt that these diseases could be greatly lessened and the recoveries greatly increased by so doing. On the other hand, however, in the families of the higher classes and in our small towns and villages, I do not consider it likely that parents will surrender their sick children to public authorities or that such hospitals will be erected. Nor do I consider it essential that this should be done where home facilities for isolation and disinfection can be had. When we consider that such diseases are probably communicable before a diagnosis can be

made; that in many cases the disease is so mild that a medical attendant is not called, or, at least, only at a stage of the disease, it would seem that even should isolation hospitals be erected, they would only lessen to a certain extent the spread of infectious diseases. To this extent they are certainly desirable, and if intended to be used only for those who would voluntarily make use of them, the plan is perhaps practicable. In the meantime I think we should urge the use of placards and of quarantine so far as possible, in all cases of infectious diseases.

Dr. J. N. TAYLOR, of the State Board of Health of Indiana, said: In our state they have not the facilities at their command for carrying out the ideas proposed. We understand that in the old countries and in the great State of New York, with hospitals amply supplied and with good nurses, many persons deliberately chose to go to those hospitals to be treated rather than to remain at home; they are modelled on a practical plan, are clean and nice, nurses are furnished for the purpose and the very best talent in the State in the way of medical attendance is secured. The plan proposed would be highly practicable here, and there would be but little objection where such were the facts, but in small municipalities where hospitals are considered as public charities and where only certain patients are inmates there would be such a strong antipathy against being treated at a hospital that it could not be carried out.

Dr. THOMPSON, president of the State Board of Health of Kentucky, said: It is very easy to talk about how to do things, but doing it is a different thing. I do not believe that the government ever did exist, and I know it does not exist in the United States, that would attempt to execute such regulations as have been outlined in this paper. With us such a system would not be practicable, nor do I believe it necessary. Most of our people can take care of diphtheria, scarlet fever and whooping cough, and they would not consent for their children to be sent to these isolation hospitals. The system would be so horrifying to the masses of the people that few attempts would be made to enforce it.

It may be useless to placard so far as the individual family is concerned, but it may certainly be made a useful warning to the public. With us few people would enter a house which had on it a placard announcing the presence of diphtheria or scarlet fever within, and none if it is announced small-pox. In all these cases we should isolate the sick as far as we can, use thorough disinfection, and in my experience the results have been perfectly satisfactory. Such a system would be too expensive to be practical in my country, to say nothing of the exposure of the sick incident to removal to such hospitals, and the violence that may be done to the feelings of fathers and mothers, which could not fail to arouse such a strong public sentiment against

such a system as would sweep any set of officials out of existence who would attempt to establish and enforce it.

Dr. W. L. SCHENCK, of the State Board of Health of Kansas, said: Whatever they may be able to do in the British possessions in this matter, we could not carry out the proposition on this side of the line. Were we to attempt to put in isolated hospitals these various diseases, except perhaps small-pox, we would find the State Boards of Health promptly abolished. We are seeking in many municipalities to educate the people up to the point of isolation. In Kansas, were we to attempt to move the patient in cases of scarlatina or diphtheria we would have trouble. If we can teach them the importance of isolation and thorough disinfection, to exercise that care over a case that they have not yet learned, then will they be ready for a further step. We must bring them up, step by step, to feel the importance of exercising care, in preventing dissemination, and in destroying the poisons of the various diseases referred to in the paper, and we shall have done a great work.

Dr. H. B. BAKER, of the State Board of Health of Michigan, said: I had not expected to say anything upon this subject, but I should like to say a few words in reference to it. First, I wish to endorse very strongly the proposition put forth by Dr. Bryce for having isolation hospitals for the treatment of those contagious and infectious diseases, which are of the most consequence to us in the North. In our State, scarlet fever and diphtheria are of far greater consequence than small-pox, and I suppose that is so in Ontario. And the proposition put forth by Dr. Bryce is what we are aiming at. We have a law which requires the local board of health to take such action as in the judgment of the local board is thought best; to remove the patient or the people near or treat the infected house as a hospital; and it seems to me that both methods are better than one; that is, the plan of having a hospital for such cases as can be removed and of having the house isolated and used as a hospital where they cannot be removed.

In our State we have had two or three outbreaks of scarlet fever where the persons interested would have been glad if removal to hospital could have been enforced. One was in a business block on a main street in Lansing, where a placard was put upon the front entrance to all above the first floor, which shut out a large number of people from several kinds of business. If there had been a hospital to which that one case could have been taken and the room thoroughly disinfected, the whole block might have been relieved from trouble and allowed to continue business.

If isolation hospitals were established, we would generally get help from the hotels and business people when they come to understand it. Just before I came here the State Agricultural College stopped because

of scarlet fever, when if the first cases could have been removed to an isolation hospital, and the room properly disinfected, the probability is the school could have continued.

Dr. BENJAMIN LEE, of the State Board of Health of Pennsylvania, said: There is one thing supposed by the gentleman on the right, in regard to this question, which I think all officers of State Boards of Health should make themselves thoroughly certain about; that is, What is the actual power of the health officer in the matter of removing persons infected with contagious diseases. I found during a slight outbreak of small-pox which we were having, that the board of health was much hampered in its work from the fact that persons whom it considered ought to be removed, refused to be removed. I communicated with a law officer as to whether the person could be removed without his consent, and he replied that the law was understood to be that he could not. The Attorney General of the State sent me the law under which the board of health of Philadelphia acts, and which applies only to cities of the first class, and he gave it as his unqualified opinion that in cities of the first class the board of health could remove a person affected with small-pox, if in the opinion of the board it was necessary for the protection of the public health. A similar case to that occurred in the city of Pittsburgh, a city of the second class, also having a law of its own. In this case suit was brought against the health officer for removing a child to the municipal hospital against the wishes of its parents. In this case, an amount of force had to be resorted to, and in this case the judge unqualifiedly sustained the action of the health officer, and his charge was so completely satisfactory that no further action has been taken. So, it has been determined in our State that a health officer has the absolute power to remove cases, which he deems necessary to be removed, for the protection of the public health. In both of these cases small-pox was the disease in question. My own belief is that such hospitals, as indicated in the paper here this evening, is only a question of time. In cases of scarlet fever, the practice is to isolate the family, the child that has it remains in the house and the other children are sent away and you have left an infected house, which may be infected for months. Why is it not better to remove the source of the infection than the entire family? Moreover, how are we to know that those we send away are not going to provide for the spreading of the infection where they go.

Dr. S. S. BOOTS, of the State Board of Health of Indiana, said: This subject has almost been exhausted. And while I do not wish to be understood as disapproving it, I believe it is impracticable to-day; certainly, we cannot expect, in whooping cough and measles, to have children taken away two or three miles to a hospital, away from the care of parents and place them in the charge of strange attendants,

or, as is indicated in the paper, with the mother or elder sister, if they have not taken charge of them. Perhaps the mother may have four or five little ones, there may be no elder sister, and to take her little one from the mother's care to a hospital to be treated by strangers, I say, gentlemen, it would be cruel. I do not believe there is a gentleman in this room that would take his little one from its mother's care to a hospital to be treated by some one else. You have seen scarlatina arise in families, you could not tell from whence it came; how do you know that every one of that family has not been exposed to that identical cause; within twenty-four hours you have four or five cases. Now, do you propose to eliminate that family, take first one and then another until you have them entirely removed? I think it is impracticable. It may work in some places, but in Indiana it would not work. Were we to attempt such isolation by force in Indiana, the next winter that our Legislature met there would be no Board of Health in Indiana.

Dr. C. N. HEWITT, of the State Board of Health of Minnesota, said: It seems to me that there are two sides to this question, one of business and the other of theory. In my work of sixteen or seventeen years as health officer, I have learned to appreciate certain facts. Minnesota has a good deal of good theory; we had seven hundred and seventy-five deaths of diphtheria last year, and I have traced the spread of it over and over again from one family to another, clear across a township into the next one, and we consider isolation as one of the most important duties to be looked after. We are moving on, because we are driven on; we are subject to the rules of society the same as others, but we are endeavoring to educate our people in isolation in infectious diseases. First, there should be protection to the rest of the family; next, safety to the population. If these two things are accomplished, you have an isolation hospital. It does not make any difference what people call it. The dread is of that horrible name, "the pest house." Ordinarily they have no hesitation in taking a small-pox case out of the family, but with other diseases you have more trouble. It will always be a serious question whether isolation should always be enforced in the way proposed; I do not think anybody could do it.

Dr. ORME, of the State Board of Health of California, said:

Mr. PRESIDENT: In California, in the treatment of infectious diseases, such as scarlatina, diphtheria and small-pox, we urge the necessity of isolation. But, as Dr. Hunt says, we have to use a great deal of persuasion. We are able in our State to have parties removed who have no regular or permanent home; for instance, in boarding houses, hotels, etc. And while we should have the power, as Dr. Lee says they have in his State, to go in and remove any and everybody, yet, owing to the lack of legal authority, we cannot do it; and moreover,

public sentiment will not permit it. When we have a case of small-pox, if we could go into the house and remove it to an isolation hospital—we could then stamp it out. What we need, it seems to me, is for health officers to have greater authority, and it should be almost arbitrary power. Whenever we have had small-pox we have been able to stamp it out, right then and there, by sending the patient to an isolation or small pox hospital: but where we have a case and it is permitted to stay in the house even for a day or two, we have almost always had another case.

There is no doubt about the benefits to be derived from isolation hospitals, and it is far more economical to have them. In our State we have to placard and guard all infected houses, allowing no one to go in or out: especially because a great many of the native population are no more afraid of small pox than you are of a slight cold.

I think if this conference should place itself upon record that they are in favor of isolation hospitals for all contagious diseases, such as diphtheria, scarlet fever and small pox (not whooping cough nor measles), that it would be a great help in educating the people to the fact that isolation is the most efficient means of eradicating these diseases from the community.

Dr. P. H. BRYCE, of the Board of Health of the Province of Ontario, said: From the remarks of those who have been engaged for the longest time as State officers in handling epidemic diseases, the argument is so decidedly in favor of the proposition in the paper, I need hardly discuss it. My friend, Dr. Orme, has stated in his opinion, that even with the present advance in sanitation, the kind of hospitals referred to in the paper would be impracticable. He has likewise stated that in every case where he has found it possible, he has isolated the case and that the disease has been eliminated. I have noticed that in every case it has been assumed that it would be compulsory. I feel that these gentlemen by their testimony have established the fact that it is absolutely desirable. Now, as to practicability. Last winter I had a telegram from one of our far back settlements stating that a case of diphtheria had come down on the Manitoba railway from a lumber camp. I learned that the patient had been taken sick in a lumber camp and placed in a lumber shed, there being no hospital available, and from that he was taken to a hotel and was there two or three days. On learning what was the matter with him, he was ordered away and he came down on the railway, exposing the whole crowd in the cars and the people along the way. Finally, on reaching his destination, the gentlemen of the Board of Health found him in the hospital under these unfortunate circumstances. I had to deal with the matter along the whole line of railway; I went up and brought down officers for nearly a hundred miles to operate with me. I said to them, your people are poor and you live in one or two rooms and

you will have a serious outbreak here. What do you recommend? As a practical measure of eliminating diphtheria in your district, I said, you will have to erect at the junction of four townships a house where you can place every case of diphtheria; the physician can then go out at least every other day. If they are left in the families the whole household is affected and they will carry it from one house to another. I said, you recall the last occasion it was brought in, every house, with the exception of two, had diphtheria, as it was carried from one house to another. Build your little house, it will only cost two or three hundred dollars, and you can send cases to it. On another occasion I was called to a town which had sixty children in the school, twenty-nine of whom had diphtheria, resulting in fourteen deaths. I recommended again that a room be fitted up for a hospital and that the first child that took diphtheria should be taken there and that the family physician should have charge of the case and that the house should be disinfected; this would permit of the father going to work without fear, and of the girls going to their sewing rooms and would result in stamping out the disease. Gentlemen, this paper is offered for your encouragement; it is for the elimination of suffering, economizing in methods.

Dr. Schenck moved that the paper of Dr. Bryce be referred to a committee of three, consisting of Dr. Bryce, Dr. Orme and Dr. Hewitt to report.

The motion was adopted.

The question proposed by the State Board of Health of Indiana was then called up: "Is it advisable to attempt to unify the methods of procedure of the various state boards of health?"

After brief discussion Dr. Taylor, of Indiana, offered the following resolution:

Resolved, That a committee be appointed whose duty it shall be to examine the laws and methods of procedure governing the various state boards of health and those of the provinces, and from such to construct a system of laws and methods of procedure such as shall meet the approval of this body.

Be it further resolved, That when such system or code is adopted by this body, every legitimate means be used to cause such to be enacted by the Legislature of the several states.

The resolution was adopted.

Drs. Thompson, Baker and Jones were appointed a committee to consider that portion of the president's address which referred to the inefficient administration of the quarantine system of the port of New York, and report during the present session. Thereupon the conference adjourned until 9 o'clock of the following day.

MORNING SESSION. SATURDAY, MAY 5, 1888.

The conference re-assembled at 9 A. M., Saturday, May 5. After the reading of the minutes the chair announced that the two first questions on the order of business, which had been postponed the evening before in consequence of the absence of Dr. John H. Rauch, who was to take part in the opening discussion, would be the first business.

Proposed by the State Board of Pennsylvania: "Should the national government assume the control of quarantine at all ports of entry?"

Proposed by Provincial Board of Quebec: "Under which control should quarantine be, both in Canada and in the Union: under federal government (national) or under provincial or state governments (local)?"

Dr. Benjamin Lee, secretary of the Pennsylvania Board of Health then read the following paper:

Should the National Government assume the control of Quarantine at all Ports of Entry?

By BENJAMIN LEE, of Philadelphia.

The question suggested for the consideration of the conference by the board which I have the honor to represent, must have been much in the mind of every sanitarian upon whom rests a responsibility since our last meeting. All that I propose to do is to introduce it. It has already been ably discussed by leaders in sanitary reform, and there are those present who can do it much fuller justice than I. Two of the three most dreaded contagions have been brought to our northern ports from across the Atlantic during the past season. If one of them was successfully excluded, which the test of a heated term is needed yet to decide, it would almost seem to have been more by good luck than good management, so many were the defects discovered in the means adopted to bar its entrance; while the other has effected a lodgement and already created much uneasiness. Both of these diseases a perfected system of quarantine should, in the opinion of our foremost sanitarians, entirely debar. At the present moment one of our southern states has already several centers of infection of the third of this detestable triad, and with months of hot weather to look forward to, the outlook there is not reassuring. All of these diseases are exotics. They do not belong here. There are born of the filth of old and decaying civilizations or of other climes. There was a time when our unpolluted soil was virgin to them all. They can and must be excluded. But they never will be excluded so long as the present irregular insufficient, disconnected mode of defensive warfare is relied upon to accomplish this object.

There must be from the northeast to the southwest, from the St. Lawrence to the Rio Grande but one quarantine system, one set of quarantine regulations, one organization and one controlling head. Of course, in saying this I do not forget that one of the great American ports belongs to another government than ours. But the authorities of the Dominion have, of late years, shown such zeal in their efforts to unite with us in all that concerns the sanitary welfare of the continent that I conceive there would be no difficulty in establishing a reciprocal relationship which would make the two systems one in their practical workings. As Dr. Rauch, in his admirable report, entitled "Coast defences against Asiatic cholera," well says: "The fact that in the absence of national health authority and legislation, marine quarantines are controlled and administered by State and local authorities, results in diverse and frequently conflicting regulations and requirements, and of necessity in a tendency to limit precautions to their own individual interests, commercial, as well as sanitary. He might, however, have made his assertion stronger and said 'commercial rather than sanitary,' for I believe it will be found in every instance where the authorities of a city are made the repositories of this trust, the interests of trade are allowed to be paramount to those of public health. So keenly has this been felt that during the time that cholera-infected ships were lying in New York harbor last autumn, one of the oldest and most conservative medical societies of the country, the College of Physicians of Philadelphia, appointed a committee, as it is probably known to all of you, the principal object of which was to obtain concerted action on the part of all medical societies in urging upon the state and national authorities the adoption of a uniform and efficient system of quarantine for all exposed ports. Of the lamentable deficiencies which this committee, in the course of its investigations, found in the preparations of the sanitary authorities of the three great ports of entry of the Middle States for the reception of vessels infected with Asiatic cholera, I have neither heart nor desire here to speak. But certain of their deductions are entirely germane to the question and must not be slighted. There is one cause, they say, of the defects of our present quarantine stations which is so prominent that we may dwell on that alone. It is the great expense. Were it not for the question of money, there would have been physicians constantly in attendance at the New York station, and, consequently, better management and discipline would have been maintained, while at Philadelphia and Baltimore there would have been adequate establishments provided for the isolation and observation of large bodies of immigrants.

Municipalities and states are wont to scrutinize every dollar of their money appropriations, bringing their expenses down to the closest living limit. Quarantine in this country being as a rule enforced mainly against yellow fever and small-pox, a mistaken economy has caused

no provision to be made for the more perfect establishments absolutely required for protection against cholera.

Philadelphia, Baltimore, and other ports of a more limited commerce, are unable to spend as much on their stations as is New York with its large revenues from that source, yet an inefficient quarantine at any station exposes the whole country to the dangers of the importation of disease. But it is manifestly unfair that a single municipality or state should defray the expense of protecting the whole public.

How then can we have equally complete stations all along the coast? We believe that this can be effected by putting quarantine into the hands of the national government. We know that there are legislative difficulties in the way; that quarantine partaking of the nature of police regulation, its exercise, it may be claimed, belongs to the local authorities. Yet, even if it be conceded to be a police regulation, its scope is not local, but extends over the whole country, and it would seem in justice that it should be exercised and paid for by the whole country.

In thus urging that the outer line of fortifications should be constructed at the expense of the general government and manned by federal troops, I do not wish to be understood as suggesting that any of the precautions, excellent as far as they go, now taken by local authorities for their self-protection should be abandoned. There still will be ample room for a secondary cordon of inspection within the lines where much useful work in detail may be accomplished. But the great burden of protecting the nation should be borne by the nation. I am well aware that there is one brilliant and conspicuous exception to the general rule of inadequate provision for, and inefficient administration of local quarantine, that of the State Board of Health of Louisiana, but even there the resources of the entire state, and that a rich state, are at its back, and the result, moreover, has been attained only by the persistent energy and magnetic powers of a single individual, and may not long survive him. In order to elicit a general expression of opinion on this most urgent question I would offer the following resolution, viz:

Resolved, That this conference, recognizing the failure of local authorities to administer quarantine effectually in a large majority of cases, respectfully urges upon the national government, the duty of assuming the control of quarantine at all ports of entry.

Dr. JOHN H. RAUCH, of the State Board of Health of Illinois, said: My views on this subject have been so often expressed that I do not feel like occupying the time of the conference. I prefer to wait until others have discussed the subject, as I see no one here who thinks the State should control it, it seems to me a one sided question.

Dr. C. N. HEWITT, of the State Board of Health of Wisconsin, said: I do not desire to discuss the question. I think those who are familiar with the American Public Health Association, and the efforts made

by honest workers to arrive at a satisfactory solution of the question—including the efforts made for legislation in Washington from the beginning until to day—are satisfied that there is but one side to the question. I think we should get down to business; and that is, What are we to do during the coming summer; what ought we to do as a body representing the State Boards of the country? This is the only side of the question I desire to discuss. As it is mentioned in the resolution by the Secretary of the Pennsylvania Board, that does not come in the question except in a general way. I do not desire to discuss the subject in a general way, as I think it has been discussed to death.

Dr. ORME, of the State Board of Health of California, said:

Mr. PRESIDENT: I would repeat, as has already been stated, that this is a question that affects us vitally upon the Pacific coast, where we have been trying for years to prevent the introduction of diseases from foreign ports, which, landed one day on our coast, can be within a week scattered over half a dozen different States and Territories. I hope, and I know, that this conference, before it gets through, will adopt some definite measures which they will endeavor, through the National Government, to enforce. As we all know, the States cover such a vast extent of territory that it is impossible, many think, to effectually guard our borders without National control, or at least coöperation. We have come together to learn from the different States what is being done, and what should be done, in the way of improving the methods whereby we can keep out epidemic diseases, or stamp them out, when they appear in our midst. I do not desire at this time to enter into particulars as to the necessities and requirements of the Pacific coast in the matter of quarantine. You know our wants. We have decided views upon this subject; and I hope that I shall be able to go home and tell our people that something definite has been accomplished by this conference. As Dr. Hewitt says, "This is the question of the hour." The National Government must give financial aid to our coast. Our people have petitioned for proper quarantine facilities. Not only our State Board of Health, but the San Francisco health and other boards, have for years urged the necessity of Congress making an appropriation of at least \$100,000 for a quarantine station at San Francisco. We also want one at San Diego. The importance of this subject of quarantine to our coast cannot be overestimated. I came here for the special purpose of trying to get this conference to take some action, so that, when the matter does come before Congress, we shall be united on this subject.

Dr. P. H. BRYCE, of the Board of Health of the Province of Ontario, said: I would suggest, if it be in order, that the discussions introduced by the second and third questions be made a part and parcel of this discussion. If it should be found that a National quarantine is desirable, why not discuss the two next propositions.

Dr. H. B. BAKER, of the State Board of Health of Michigan, said: I hope that will not be done. I think we had better finish the discussion of this subject. For myself, I have no confidence in National quarantine, as an exclusive system, if it could be done. The question involves the interpretation of the Constitution of the United States, which might have to be amended before it could be accomplished in full; but if it could be done, I should have no confidence in it. I certainly hope we shall do nothing here to show that we favor displacing the control of local affairs by the States, or by local boards; it seems to me that the most the United States Government could be expected to do would be to supplement the work of or to aid the State and local boards. Some of the reasons why I have no confidence have been expressed by Dr. Rauch. He has no confidence in the Marine Hospital service, and claims that it should be done away with. I agree with him that the employés of railroads are just as much entitled to hospitals as are those in the mercantile marine service. One of the reasons why I should not favor asking the United States Government to have the absolute control of all quarantine is the same as Dr. Rauch has stated, the Marine Hospital service would have control of the quarantine, and we know what it would probably be. Under present circumstances we are making progress. The local quarantine at New Orleans is very satisfactory, for the reason that great local issues are concerned. When yellow fever comes in at New Orleans, they suffer terribly, and they put their hands in their pockets to maintain an active sanitary association, and they have found men who were able and did establish a good quarantine system there. We could not hope to elevate the whole quarantine system of the country up to that level if we placed it under the National care; but, under the stimulus of local suffering, especially mercantile losses, the quarantine service has been made quite effective in one place.

Dr. THOMPSON. The power exercised by the Sanitary Council of the Mississippi Valley is what compelled New Orleans to quarantine.

Dr. BAKER. Well, that is to say, sanitarians can and did bring the pressure to bear; and we can on New York. But if we undertake to raise the whole of the United States upon our shoulders at one time, upon a level, we shall fail. It is easier to lift one end of a heavy stick than to raise the whole of it together, and this last is what we are undertaking to do when we rely exclusively on a National quarantine. The sanitarians of this country can do for New York what they have done for New Orleans—help them to establish a quarantine for their own interest and the general welfare. We can do so for Baltimore, for Philadelphia and for any other port that is threatened. Where the greatest danger is, from time to time, we can concentrate our efforts and raise the service up to a higher plane. If it is under control of the National Government, there are too many political difficulties in the way, and I am strongly opposed to relying upon

the National Government, to the neglect of local effort. I think it is proper to ask the National Government to help the South to keep out yellow fever, and the North to keep out small-pox, and the whole country to keep out cholera. I think there is a bill before Congress to make an appropriation for quarantine stations; and, although it will go into the hands of the Marine Hospital service (and Dr. Rauch says there is not a sanitarian in the service), yet I shall be glad if the bill becomes a law, and glad to have the general government do what it can to keep dangerous diseases out of this country; but I hope we shall not yet rely upon it exclusively, nor do anything at present which will lessen the activities of local quarantine authorities.

Dr. LEWLLYN, of the State Board of Health of Iowa, said: I would like to ask Dr. Rauch something about his inspection. Suppose that cholera arrives at New York. I want to know what his method would be to prevent its arrival in Illinois; for, if Dr. Rauch was successful in preventing its arrival there, we in Iowa would feel pretty safe.

Dr. BRYCE. We have here three questions, and if we can only get them together, we shall get out of this business much quicker.

Dr. THOMPSON, President of the Board of Health of Kentucky, said: The advisability of a National system of quarantine has been so often and so thoroughly discussed in the American Health Association and the medical journals of the country, that the respective powers of the general government and the States are now pretty well understood. It has been decided again and again that the government officials cannot establish a quarantine within the boundaries of the State unless invited to do so by the State authorities. Thus confining the powers and duties of any National service which may be established for the protection of our sea coast. Practically, National quarantine should be confined to protection against cholera and yellow fever. In the absence of such general system, this conference may do much by arousing our seaboard States and cities to prompt action as against these diseases. I agree with Dr. Baker, that this conference can bring a strong pressure to bear upon the authorities of the port of New York, as was done by the Sanitary Council of the Mississippi Valley in regard to New Orleans in years past. I think it is our duty to do this, and to say distinctly that railroads coming out from New York, or any other badly equipped port, will be quarantined, if necessary, to protect our respective States.

Dr. BENJAMIN LEE. "How can those diseases be kept out of this country?" is presented by Michigan, and I move that the further discussion of this be postponed until we take up these other questions and have it all at once, and when it gets fully before us, we can discuss it better than now; we can at least confine ourselves to the main question. Therefore, I move that the discussion of the resolution be postponed until the third and eleventh propositions are before the conference.

The motion was seconded and carried.

The president then announced the following questions open for discussion :

Proposed by the State Board of Kentucky.

a. What is the value of inland quarantines as against cholera and yellow fever ?

b. In a country like ours, where should such quarantine stations be located, and how should they be equipped and managed ?

c. How can state boards of health of adjoining states profitably co-operate with each other in such quarantine work ?

Proposed by the State Board of Michigan.

11. *a.* What can each state board of health do, and what are the best procedures to prevent the introduction of dangerous communicable diseases (small-pox, cholera, yellow fever), into states and localities free from such diseases ?

b. How can these diseases be kept out of this country ?

c. What should be done to prevent the continued introduction of those dangerous communicable diseases (diphtheria and scarlet fever), which are common in this country, and which, therefore, cause the most deaths ?

Dr. J. F. KENNEDY, of the State Board of Health of Iowa, said : I was not consulted at all on the discussion of this subject. I have learned since I have been here that you read last night and brought up a discussion on a paper that referred largely to inland quarantining, and as the paper I prepared is so much at variance with so many ideas that have been expressed here, I feel reluctant to read it. I shall make some allusion to the Marine Hospital service, and I understand that has been put to bed long ago ; of course, I only speak of it from the standpoint in Iowa, where we do not expect to have anything like cholera or yellow fever.

Thereupon the following paper was read :

Inland Quarantine as against Cholera and Yellow Fever.

Dr. J. F. Kennedy, Secretary State Board of Health of Iowa, said :

MR. PRESIDENT : The selection of myself to reply to the questions propounded by the State Board of Kentucky, was an arbitrary one, and was, I fear, most unwise, representing as I do a State, that, in a special way, has given very little attention to the subject of "inland quarantine as against cholera and yellow fever." I am glad, however, to know that associated with me is Dr. Bryce, of Toronto, whose excellent judgment, extensive research and observation respecting sanitary subjects, and whose location are such as to supply any deficiency on my part.

While volumes have been written on quarantine in general, and on quarantine as against cholera and yellow fever as applied to our sea-ports, yet I have been able to find but little on inland quarantine as applied against these diseases.

The questions proposed are as follows :

a. "What is the value of inland quarantines as against cholera and yellow fever?"

b. "In a country like ours where should such quarantine stations be located, and how should they be equipped and managed?"

c. "How can state boards of health of adjoining states profitably co-operate with each other in such quarantine work?"

I confess that I am somewhat skeptical in regard to the benefits to be derived from even maritime quarantine, as heretofore conducted, as against these diseases, judging from the literature upon the subject and from past observation.

Prof. Edmund A. Parkes in his excellent treatise upon "Practical Hygiene" says regarding cholera: "It is usually impossible to have rigid quarantines, for nothing short of absolute non-communication would be useful, and this is impossible except in exceptional cases for persons very slightly ill, or who have the disease in them but are not yet apparently ill, or possibly who are not and will not be ill at all, can give the disease, and, therefore, a selection of persons cannot be made. Then as the incubative stage can last for ten or twelve days, and there are some good cases on record where it has lasted for more than twenty, it is clear that quarantine, unless enforced for at least the last period of time, may be useless. The constant evasions also of the most strict cordon render such plans always useless. An island or an inland village far removed from commerce, and capable for a time of doing without it, may practice quarantine and preserve itself, but in other circumstances, both theory and actual practice, show that quarantine fails."

The late Prof. A. B. Palmer, in his recent work on epidemic cholera, writing from an extensive personal experience with the disease, as well as from a critical observation of the writing of others upon this subject, says: "The usual, or at least the frequent, inefficiency of quarantine regulations has caused many in the past to regard them as comparatively, if not absolutely, useless. That on land a strict and efficient quarantine is impracticable is conceded by most observers. * * * Hereafter, as heretofore, I fear that marine quarantine will not exclude the disease. * * * Failure of quarantine regulations has occurred during the whole authentic history of cholera. Doubtless there have been particular instances where quarantine restrictions, even imperfectly enforced, have prevented the occurrence of the disease in situations where it otherwise would have come; but, as M. Colin says, this is not known, and the failures have been so numerous that the system as practiced, cannot be regarded as a success. As an illustration of what he states, he cites the case of Italy and Spain after the epidemic character of cholera in southern France was realized. He says not only was quarantine proclaimed in these countries, but it was enforced with all the vexations and minute re-

strictions of a mediæval infatuation, and that not merely against ships or travelers from infected places, but against all comers from whatever quarter. Notwithstanding all this the very first countries after France to develop cholera were Italy and Spain; because, he says, no doubt, the quarantine was not conducted in a proper and efficient manner. He says further that the French Journal of Hygiene of a recent date takes the ground that land quarantine is entirely useless and deceptive and marine quarantine is uncertain and not to be relied on.

The Vienna conference of 1874 condemned quarantine on land.

On the other hand Prof. Chaumont, editor of Parke's work above referred to, says in a foot-note, "when circumstances are favorable however, good quarantine may be successful even on the main land," and cites the very satisfactory and successful results obtained in Algeria in 1861.

The late Dr. J. J. Woodward, Surgeon U. S. A., in an official circular from the Surgeon General's office (1876), states "the general tenor of army experience is strongly in favor of quarantine."

In regard to the prevention of yellow fever, the yellow fever commission, under the direction of Dr. J. M. Woodworth, of the U. S. Marine Hospital service, after a very pains taking and apparently impartial investigation of the epidemic of 1878, arrived at the conclusion that there was little, if any, protection in loose or inefficient quarantine, but absolute safety in rigid non intercourse. The commission bases its conclusions upon observations made at points in Louisiana, Mississippi, Alabama, Tennessee and Kentucky.

At points where absolute non intercourse was observed no case occurred. At places where no quarantine at all was observed the greatest mortality occurred, and those places adopting and practicing lax quarantine measures were visited by the disease and its extent and prevalence were practically proportionate to the stringency of the quarantine and the completeness of the isolation.

Dr. S. S. Herrick, late Secretary of the Louisiana State Board of Health, in contemplating upon this report says: "The lessons of the recent epidemic of yellow fever must bring the unprejudiced mind to the belief that there was a clear relation between enforcement of quarantine regulations and prevalence of yellow fever in all threatened communities, that is to say, that there was no security in a loose system, and complete safety in absolute non intercourse."

He said further that the most obvious and reasonable deduction from these numerous experiments at international quarantine is to the effect that there was an almost total lack of system and suitable adaptation of means to the end aimed at, and that the proper course would be to subject all local health authorities to a central supervision, either state or national.

Since I never saw a case of either cholera or yellow fever, I must

rely largely upon the opinions of those who have had practical experience, and I find the opinion of such to be practically unanimous that quarantine to be effective must be complete. Now, quarantine to be complete, that shall enforce absolute non intercourse and perfect disinfection, must be most despotic and must require for its enforcement measures the most extreme.

Such measures, unless in the greatest emergency and only in the face of the most appalling danger, will in this country, indeed in any country, only be tolerated under emphatic protest and only even then but for a short time.

So I might say in reply to the first question that the value of internal quarantine as against cholera and yellow fever is practically *nil* owing to the numerous and gigantic difficulties in the way of its proper enforcement, and yet under seemingly impracticable, if not impossible conditions, quarantine has been successful.

The second question: "In a country like ours, where should such quarantine stations be located, and how should they be equipped and managed?" evidently implies that in certain inland localities quarantine stations should be established. I confess my inability to answer the question.

In a general way I may say that all, at least all important, ports of entry, should be as they are supposed to be quarantine stations. All large cities on the coast and inland should be prepared to promptly recognize and as promptly isolate and take care of any case of cholera or yellow fever occurring within their respective limits. Should either disease break out in the largest or the smallest hamlet the strictest measures should be instituted at once to isolate all infected and exposed persons so far as known: to quarantine the places of infection; to disinfect thoroughly, or destroy everything, including excreta, in, and especially everything liable to go out from such foci of infection. All persons known to have been exposed to either disease should be quarantined from ten to twenty days. With such prompt isolation, quarantine and disinfection I can see no practical benefits to be derived from local quarantine stations, inland.

It occurs to me that we must look largely and justly too to such stations and quarantine regulations as exist in the Mississippi river below New Orleans, as so graphically described by our able colleague Dr. Joseph Holt. Such stations located, managed and equipped as this has been, under the efficient directions of the Louisiana State Board of Health, if located at all our ports of entry would afford the greatest, if not the only reliable safeguard to our homes.

Under the late efficient laws in force in several states, including my own (Iowa), every township, town and city is supposed to be a quarantine station, having its health officer and rules and regulations and penalties provided by statute in case of violation, for the prompt

report and isolation of the first, and every case of infectious disease that should occur in any part of the State.

While all agree that cholera and yellow fever are exotic, and, therefore, must be imported from abroad, yet, like typhoid fever, with which we are unfortunately too well acquainted, their spread and extension are largely dependent upon the pollution of the air, soil and water by filth accumulations and in yellow fever by thermometric conditions super-added.

I have noticed with pleasure that the United States Senate committee on epidemic diseases has lately reported a bill providing for the establishment of seven additional quarantine stations and that there is a strong probability that the bill will become a law. Upon the recommendation of Dr. Hamilton, Surgeon General of the United States Marine Hospital service, the stations selected or rather named in the bill are at Delaware Breakwater; Cape Charles, Virginia; Sapelo Sound; Key West, Florida; San Diego, California; San Francisco, California, and Port Townsend, Oregon. These are in addition to the one recently established at the mouth of the Mississippi.

It is to be greatly hoped that before the hot season is fully on, temporary stations will be established at each of the above-named points and that so soon thereafter as possible, permanent stations, fully and judiciously equipped will be in successful operation.

It would seem that yellow fever must have hibernated in Florida, since thus early it is officially reported at Nicanopy, Plant City, Barlow Flag and Tampa. It would seem further that if there is a State in the Union that is in need of a live, vigorous health board and of a good health law back of it, it is Florida.

Reports from Chili are far from encouraging and at this early date in the season it may be safely asserted that a visitation to this country by yellow fever and cholera is among the strong probabilities. Hence arises the necessity for the thorough and prompt removal, disinfection or destruction of all filth, garbage and everything that can in any way vitiate the air we breathe or the water we drink.

In reply to the third question I have to say that I know of no more efficient method for state and provincial boards of health to coöperate with each other in such quarantine work than by that lately adopted, interstate notification; and by each state and provincial board through its local boards using promptly and faithfully the means placed within its hands by legal enactment to prevent the importation and restrict the spread of these diseases.

In Iowa, should such a case occur, the local and health officer would at once telegraph and write to the state board giving name of person, locality, exposures, and, if possible, source of infection, together with the means used for restricting its spread. This intelligence would at once be communicated to every state board in the country.

The local board having jurisdiction where the case occurred would at once, without awaiting any specific instruction, institute such means of isolation, quarantine and disinfection, together with vaccination in case of small-pox; and such thorough renovation and destruction of all agencies contributory to the spread of the disease, as would most likely prevent its spread.

I cannot think of any more efficient nor practical method of stamping out or restricting the spread of such diseases inland; and a prompt and hearty coöperation on this line to my mind promises the safest, if not the only safe method of procedure.

Dr. C. N. HEWITT, of the State Board of Minnesota, said: To bring the matter to a conclusion, I propose that we elect a representative committee (a formal election would give more weight to the committee), to enter into correspondence with the seacoast sanitary authorities, and see what coöperation they can give us. In this way a large amount of information could be obtained and perhaps a practical arrangement made. So far as interstate control of infectious diseases is concerned, I mean of infected persons traveling by rail, we can (if we have notification by the maritime authorities) arrange such inspection service as we wish, and provide, also, for the oversight of emigrants going from one State to another, often a very important matter. But, sir, while I think we should deal here with the maritime and interstate management of imported infectious diseases in some such practical way as I have suggested, I think our discussions are too general and indefinite; include too many side issues, and that we are not getting down to business as we ought to do, and the business which most directly concerns us here.

In my own State, for example, I find 777 children dead in 1887 by diphtheria; over 700, of all ages, dead by typhoid fever. Croup and scarlatina take many more, and in summer comes the scourge of infancy, cholera infantum. These, sir, are the diseases, with phthisis, which are sapping the vital forces of the Nation, and not the so-called infectious diseases.

It seems to me that we are giving these last too much attention, when we should concentrate our forces on the others, which are of every day concern. I came here in pursuit of suggestions and counsel how to deal with these cases of sickness and death most seriously and constantly affecting our population, as they do every other population on the continent. I believe we should study coöperation in this direction. To do it most effectually, we must come to an agreement as to nomenclature and classification in vital statistics, so that we may be able to compare records.

To dispose of the imported infectious disease question, I repeat my proposition that a committee be elected to represent this conference, and to correspond, or personally visit, the maritime quarantines, to come into actual relation with and knowledge of them. The object

being to discover just what they can and will do, or what they cannot or will not do, and to form an intelligent judgment of their efficiency for the information of this conference and the State Boards. It seems to me that such a plan is feasible.

The PRESIDENT. Will you reduce your proposition to writing?

Dr. HEWITT. I will read a form of resolutions which covers it:

Resolved. That a committee of five be elected by this conference by ballot, to visit or correspond with the State, Provincial and other authorities having charge of the seaboard quarantine of dangerous infectious diseases, for the purpose of learning the methods there in use, and the character and amount of coöperation such authorities can and will give for the best protection of the people of this continent against said diseases. That said committee be authorized to act for this conference for this purpose, and be instructed to report the results of their investigation to this conference and to the State Boards of Health, and to arrange for such coöperation, should any such disease threaten to invade or actually get a foothold on this continent.

The CHAIRMAN (Dr. McCormick). Before this resolution is put to vote, I desire to say a few words. It seems to me that Dr. Hewitt's resolution is exactly to the point, and that by faithfully carrying out the idea contained in it, a fair degree of protection may be secured for this country against pestilential diseases from abroad, more especially as we can hardly hope for National legislation in time to protect us during the coming warm season. I would like, myself, to see the committee made smaller and request it, in the name of the conference, to visit and carefully inspect every quarantine station upon our seaboard, ascertain the condition of such station and the manner of carrying out such rules and regulations as may be enforced, to the end that we may be informed reliably as to the protection we now have against exotic plagues. In addition to that, I would like to see delegated to this committee authority to formulate a comprehensive system or plan for coöperation between the various State Boards of Health should one of these diseases gain a foothold on our shores and threaten us inland. For instance, if cholera should enter at the port, say of New York, Kentucky would be much interested to know what was being done by the State Board of Health of Pennsylvania, Ohio, West Virginia and Indiana to protect their own people and would gladly coöperate with them in such work, because in such way, if efficient methods were adopted, would the greatest protection be secured for our own people.

Dr. ORME. Mr. President, had it not been for the Marine Hospital service I think we would have had more small-pox introduced in our State last spring.

At our request, they placed inspectors in the Territory of Arizona, at Nogales and Yuma, to protect us from Mexico. We should be friendly and try to act in concert, if possible, with the Marine Hospital

service; but if their work is not adequate and efficient from any cause, let it be known to this conference, and let us show to them that the health authorities of the different States are closely watching and anxious to know the true condition of the quarantine service of the whole country.

I am in doubt whether the absolute control of quarantine should, at all times, be under the exclusive management of the National Government; but I am sure that Congress ought to assist the various States by making large appropriations from the surplus for the erection and maintenance of quarantine stations wherever needed. You well know we must have a station at San Francisco, also one at San Diego.

In conclusion I would state that I am heartily in accord with the resolution, and hope that it will be unanimously adopted.

Dr. LEWELLYN, of Iowa. We in Iowa are very glad to make use of any aid; but it does seem to me that a great part of the work of the marine service is not affectation; it has certainly done something, though I admit if it ever becomes really effective it must be improved a great deal.

The chair stated that the resolution offered by Dr. Hewitt was in order.

Dr. BENJAMIN LEE, of the State Board of Health of Pennsylvania, said: The discussion, I think, has taken a pretty definite shape and it seems to be directed to the difficulties before us. I would like to reply to two or three arguments of my friend from Michigan, who seems to be very wide of the track. He instances the city of New Orleans as one which has an established and finished quarantine. I think his argument has been sufficiently answered by the gentleman from Illinois, who said it was not the city of New Orleans, but the entire council of the Mississippi Valley, but for that, the city of New Orleans would not have used the present admirable system, but allow me to state one single instance; we have thorough good protection and quarantine; what has been the actual experience in Louisiana? Has not a little door been opened a few miles out. Biloxi, Miss., through which this entire system of New Orleans was rendered ineffective? It will not do to say, because you have an admirable system of quarantine at one place, you are safe, and, therefore, the Federal Government should keep its hands off; we have fifty places where it might creep in, while New Orleans keeps it off. Take, for instance, the Delaware river, there is only one place where effective quarantine can be had. That river receives the emigrants of the world. Now, the only place you can establish a quarantine for that river is in the little city of Delaware. Now, no one can establish it there in that little State with three counties, scarcely larger than Philadelphia, or can Philadelphia do so; Philadelphia is powerless; to establish quarantine within fifteen miles of Philadelphia would be to establish it in the agricultural district, which is almost unlimited on each side and the city of Chester all the

way down from Philadelphia to the State line is one continuous settlement, and there is no possibility for establishing a quarantine along there, and the hands of Pennsylvania are tied; even were they not, the city itself will not establish it. I am ashamed to say, that there is not sufficient interest taken in it, or have they means to pay for it. New York, as is well said, can pay for its quarantine out of its quarantine receipts; her commerce is much greater, and they can keep a station up; Pennsylvania can do no such thing; Philadelphia can do nothing.

We are told by the gentleman from Michigan that we cannot expect to raise the whole country, the most we can do is to raise part of it by bringing to it our personal action; but I say to you the strength of the whole chain is the weakest link, and if we leave any crack for it to creep in it is the work of futility. We make an effective quarantine at New York, Boston, New Orleans and Baltimore and we leave these inferior ports for it to creep in at. It has been the experience of committees who have been applying to Senate committees for effective quarantine stations at different places, one of those Fortress Monroe, and I think there is an application from the board of Charleston; what has been the response of the Senate, has it stated any, they cannot afford to pay so much; on the contrary, it has accepted the request of these gentlemen and has at once proceeded to enact laws and a bill of this nature, which bill, with proper support, will undoubtedly go through the Congress to establish seven, instead of two stations, the cost of which is estimated at over \$480,000. Now, with such a readiness on the part of the Senate, it has the control of the committee in Congress, with such readiness on their part to propose an expenditure of money, it is idle for us to say that the States will manage this matter and make appropriations on the supposition that it will be more effectual than the National Government will. The gentleman from Michigan, it seems to me, has strongly contradicted himself, that the National Government would get them to do it and then audit the bills.

I would like to inquire from the gentleman from Michigan what his experience is as regards local politics and their interference with State administrations, quarantine and sanitary affairs. My impression is that he has not been very fortunate in his experience. My belief is that if National politics are detrimental to sanitation, that local politics are unfortunately more so; that the pot-house politician is unfortunately more detrimental than the Washington statesman. It is supposed that with political men, who have a certain amount of private statesmanship to represent us in Washington, whereas, we all know, I know to my cost, in the city of Philadelphia, that municipal politicians belong to an extremely low grade and cannot be depended upon to discuss any such question in a proper scientific way.

I am extremely glad that the gentleman from Minnesota has brought this question down to a practical basis, which I hoped would be

reached in good time. I do want to know in Philadelphia, what we are to do next summer, as he says. that is a pressing question. We do know that our city quarantine in the hands of the board of Philadelphia, is badly placed, I have already adverted to that point as unknown, and as almost entirely without an attention. With such facilities, and cholera arriving there, the conclusion is inevitable, that cholera would reach the interior; I, myself, can see no other result; we must have quarantine on the Delaware. Now, we have been offered quarantine further down the Delaware. We have a bill at present before the United State Senate, which has a fair show of becoming a law which will give us quarantine at the Delaware breakwater, and with a quarantine at the lower part of the city, fifteen miles below Philadelphia, we may feel safe that Philadelphia and the interior will have a certain amount of protection; but, without this protection, we feel that we cannot do justice to the interior. Now, the Senate proposes to establish a quarantine station at the mouth of the Delaware, which shall be in no respect inferior to the quarantine at the mouth of the Mississippi, and it proposes an appropriation which will be adequate to accomplish this. Unfortunately this station will be under the control of the body which has placed itself in antagonism to the National Board of Health and to many individual sanitarians. Now, practically, the question is this: Shall we allow our prejudices upon this subject to interfere with practical protection, although the body which is to undertake the management of this quarantine, is not precisely the body which we would entrust it to, and which we know under the present regime it will be entrusted to? shall we allow our well-founded influence to interfere with our acceptance of this substantial aid from the National Government? shall we not be biting off our nose to spite our face, if we do so? It seems to me that we should be doing wrong if we attempt to interfere with the passage of the bill, because of our opposition to the marine hospital service.

It has been said in the course of the discussion that too much time has been taken up in discussion of maritime quarantine, and that we devote too little time to those epidemics springing up sporadically as we think in our midst. I think the only thing to be said in regard to that, is, that these things ought to be done, not leaving the others undone; because one subject is important does not lessen the importance of the other. Much importance, I think, should be attached to maritime quarantine, as we have arrived at conclusions and are able to formulate these conclusions and to ask a defined action upon them; we have educated National and State Governments up to the point upon which we stand on these matters very considerably, and where we are able to get concessions from them. Upon this subject of epidemics springing up here in our midst, we have not arrived at such conclusion. It does require immense research, more research than has been given, which will enable us to arrive at definite resolutions

and to entitle us to ask for legislation; I take it, that the meeting of the State Boards will bring these questions up and present them in the most ready form, in order that they may reach solution. Certainly. I am in accord with the gentleman from Minnesota, in saying that we should do all in our power to control local epidemics as they arise in our midst; but, as I say, the argument for one is not an argument for the other.

The resolution by Dr. Hewitt was put to vote and carried.

Dr. P. H. LEWELLEN of Iowa: I move that the election of the committee provided for in the resolution just passed, be made subject matter to be taken up at eight o'clock this evening.

The motion was carried.

Thereupon, a recess was taken until 2 o'clock P. M.

AFTERNOON SESSION.

The president announced that the further discussion of the questions proposed by the Michigan Board was in order.

Dr. H. B. BAKER, of the State Board of Michigan, said: In my opinion too little attention is paid to scarlet fever and diphtheria, inasmuch as they cause ten times as many deaths as does small-pox. Now, it seems to me that if these diseases were understood to be important diseases to be kept out of this country it would attract attention to them and thus aid in restricting them in the states. In our State we do what we can to restrict those diseases. They are being continually brought in there from without the State, and from across the ocean. The talk we have whenever we come together is largely upon those diseases that are dealt with in quarantines. I think we would greatly aid sanitary progress if these other diseases could be put on the lists and talked about as we talk about cholera and yellow fever. Cholera and yellow fever are of very small consequence in our State, and I think it is generally so in the northern half of our country. Diphtheria and scarlet fever we have every year and each one of these diseases causes in our State about one thousand deaths a year. I had hoped that we would in every possible way call attention to them and have them put upon the list of diseases that are to be excluded from the country. I acknowledge that it looks absurd to keep out diseases which we have all the time with us, but if we can prevent their continued introduction it may be that we shall not long have them with us. Of course, we nearly always have small-pox in this country, if not in New York, then in New Orleans or some other place, yet we endeavor to exclude it by quarantine, and in so doing attract attention to it so that it is easier to restrict it.

I did not expect to say much on this subject, but I hope that others

will. I hope that these two diseases, scarlet fever and diphtheria, will be classed among diseases to be excluded by quarantine, as much as small-pox or cholera, because they are of so very much more consequence.

Dr. HEWITT, of Minnesota, said: A very small proportion of our scarlet fever or diphtheria comes to us through immigrants, but the infection is kept going by carelessness in dealing with infected houses and things. It is in dealing with individual cases that we can accomplish the most good dealing with details through efficient local boards of health. In our State, popular interest is enlisted, and no more frequent inquiry comes to our office than, "What shall we do to prevent any more attacks of this character?" Our State Board may instruct two or more local boards to act together in dealing with infectious diseases, and it is not at all uncommon for local health officers or boards to call for the visit and advice of the secretary which are promptly given. The evidence of the tenacious character of the virus of diphtheria is only too abundant with us. In some instances good housekeepers, with the best sanitary environment, have cleaned their houses by all known methods (except washing with corrosive sublimate), removing windows for better ventilation, scraping walls and floors, only to see the disease re-appear and in one or two instances every child has been taken by it. We had over seven hundred cases in our State last year but no epidemic. There would be three, four, five, rarely ten or fifteen in a whole county and mostly in a single neighborhood. We have seventy-six organized counties and reports from all. The compulsory notification of infectious disease is the only reliable way to get at these facts, and it is working very well with us, having the support of medical men as a whole, and of the best of all classes of our people. Sanitary retreats, isolation hospitals, are a necessity, but how to provide them is a problem for discussion here. In the country we can sometimes obtain the removal of the sick, sometimes of the well, this last by the kindness of families who have no children. It was my own good fortune to be able to save one of my children from diphtheria in this way. Isolation and removal of the well children of a family, immediately on the occurrence of the first case, with very careful disinfection of persons, clothing, dwellings and their contents, make up the means at the common disposal for controlling these diseases.

Dr. H. B. Baker, of the State Board of Health of Michigan, offered a resolution as follows, viz:

Resolved, That the interests of the public health can be promoted by classing scarlet fever and diphtheria as pestilential diseases, to be treated by quarantine.

Dr. REEVE, of Wisconsin. This resolution seems to me axiomatic. We are not in doubt concerning the contagious, or if you prefer that word, the pestilential character of these diseases. In all the northern states both

scarlet fever and diphtheria are almost constantly with us. None of us question but what they should be isolated and quarantined; most of us have said so over and over again in the circulars and other publications of our several boards, and it would seem to me unnecessary and unwise to reaffirm that fact here as though we had just reached a conclusion or made a new discovery. Our opinion on it is in reality a thoroughly established one already sufficiently on record.

Dr. BENJAMIN LEE, of the State Board of Health of Pennsylvania, said: I would like to say one word. Our distinguished friend from Minnesota, in speaking somewhat in opposition of the resolution, developed a fact which seems to support it in the strongest manner, that was, the great length of time during which the poison of diphtheria retains its vitality; that certainly is one of the most important factors that we have to guard against so far as transportation is concerned. Diphtheria not only clings about the house and the room in which the case occurred, but clings to articles of clothing and furniture, especially of clothing which has been exposed. I believe the same is true to a very large extent of scarlatina as of diphtheria, both are eminently portable diseases. Some one has recently called it portagious. I do not know whether to dispute it, but it is transportable. Now, there was a time within my memory when diphtheria was not known in this country. There was a time within the memory of many persons when scarlatina was not known in this country, both of these diseases are foreign importations. As stated, we have them always with us but that does not interfere with the fact that they are frequently re-introduced. I have no doubt that every ship load that arrives brings more or less scarlatina and diphtheria. I consider it would be good work if they were placed upon the list for quarantine inspection, and as suggested, that the effect upon the minds of the people would be extremely wholesome. It would be a step in educating people in sanitation.

Dr. HEWITT, of Minnesota, said: I object to the term pestilential as applied to scarlatina or diphtheria in the resolution. The term belongs, by common usage, to a class of diseases of long ago, distinguished by fearful malignancy, mortality and wide diffusion, of which we have no parallel in our day. I prefer the term infectious, the customary and descriptive title of the class to which these diseases belong. That they are infectious as small-pox I am persuaded, and that they would be dealt with in the same way if found on a ship at any quarantine on the continent is, I hope, a fact; I know it to be a fact at one, anyway. I believe they would be so treated at New York or Boston. If this is the object of the resolution, to secure this rule at all quarantines, all right.

Dr. THOMPSON, of the State Board of Health of Kentucky, said: I am opposed to the resolution on the same ground that my distinguished friend is. If it was adopted we could not allow anything to

come into Kentucky; we should never allow a man or a thing to come from Minnesota or from Michigan into Kentucky, and Dr. Rauch ought not to allow them to pass Illinois, unless thoroughly disinfected. I have heard some of the most marvelous tales relating to the prevalence of diphtheria in Michigan and Minnesota I believe I have ever heard. Hence as I am not on that field I can only speak of it from Kentucky. We have nothing like such prevalence; I don't know where we get what little we do have. I believe that diphtheria can originate independent of a previous case. I have seen children die with it and there had not been a case within miles of them.

Dr. RAUCH. I will say to you that we have repeatedly known of cases by importation into Illinois.

Dr. THOMPSON. Now, this resolution, as I understand, proposes to put these two diseases alongside of cholera, small-pox and yellow fever. I don't believe that yellow fever is indigenous to the United States. I do not believe that cholera is; I do believe that diphtheria is. You never saw cholera or yellow fever prevail the whole year round. They may have missed two or three years and then sprung up without any importation, for they may hibernate, but diphtheria and scarlatina never leave the United States. I do not think that these two diseases should be put in the ship quarantine boundary.

Dr. RAUCH. In reply to Dr. Thompson I will say that if we treat these cases by isolation it is a practical quarantine, just in the proportion that we isolate does it diminish the same disease, often in the same house.

I had a letter a few days ago from one of our correspondents. He says, "scarlet fever made its appearance here and our people had just sense enough to follow out the instructions of the board and it is subsiding." If we exercise this care we can practically stop it. I do not believe there is any necessity for having diphtheria or scarlet fever in the same category as small-pox. Small-pox is much more easily managed than scarlet fever or diphtheria.

Dr. McCORMACK, chairman, said: I believe this to be the most important matter that has come before this meeting. To the sanitarian, the importance of a communicable disease should be in exact proportion to the mortality it occasions in the territory under his jurisdiction. Diphtheria and scarlet fever do not prevail in Kentucky to the extent that they do in northern countries, but they probably occasion more deaths with us in one year than have ever died in the State from either cholera or yellow fever. Our people should be taught that diseases to be really feared are such domestic plagues as typhoid fever, diphtheria and scarlet fever, and that restrictive measures against these are more important because they will save more lives and prevent more sickness than any which may be adopted against cholera or yellow fever. Facts and statistics bearing upon this practical point cannot be too persistently placed before the people. I heartily endorse the resolution.

Dr. LEE. I would like to amend the resolution by striking out the word "pestilential." It is not in any way a word which sanitarians would definitely agree upon, and I think the force of the resolution would be the same with that expression omitted.

Dr. REEVES. I offer a substitute resolution :

Resolved, That in the judgment of this conference the interests of the public health will be conserved by emphasizing the fact that diphtheria and scarlet fever are diseases of such highly contagious and infectious character that they should be dealt with by the most thorough isolation of all cases, the most thorough disinfection of all infected articles and places and by quarantining them at the seaboard and at all other places, with the same care that is taken with reference to small-pox or cholera.

On motion the substitute was adopted.

The resolution was then voted on and declared carried.

Dr. Lee's resolution, offered at the morning session, was then called up. Dr. Lee requested permission to offer the following substitute :

Resolved, That this conference heartily endorses the bill now before the Congress of the United States, to establish seven thoroughly equipped quarantine stations on the Atlantic and Pacific coasts, and respectfully urges the importance of early action upon the same.

The resolution was adopted.

Dr. Baker, of Michigan, spoke of the continued presence of yellow fever in Florida, and the dangers to be apprehended therefrom, and offered the following resolution :

WHEREAS, It is alleged that yellow fever is now present in Florida, a State not represented here, because it has no State Board of Health, and which is in daily communication with other States, and thus may threaten all of our States in which that disease can prevail ; therefore,

Resolved, That all boards of health in States adjoining Florida are urged to immediately and continuously exercise extreme care to keep the fever from entering their States.

Resolved, That, in case it shall prove that yellow fever is present in Florida, boards of health of adjoining States should establish and maintain a thorough system of so-called "inland quarantine," which means the inspection of travelers, the isolation of all infected persons and articles, and complete disinfection, these methods to be enforced with the least possible interference with travel and commerce consistent with the protection of the public health.

Dr. THOMPSON. I have no objection to the wording of that resolution. I don't suppose there is a board of health anywhere that would not be on the alert.

The resolution was adopted.

Dr. REYNOLDS. I want to offer a resolution :

Resolved, That in the future sessions and meetings of this conference Jefferson's Manual shall govern the rule of debate.

On motion the resolution was adopted.

The questions proposed by the Provincial Board of Quebec and by the State Board of Vermont were then taken up:

“Powers which Provincial and State Boards should have over local boards.”

“What legal authority ought State Boards of Health to possess in the absence of local boards?”

On motion division (A) of the questions proposed by the State of California was included for discussion:

“Cannot a plan be devised to insure uniformity and increase of power in State Boards of Health by formulating in conference, a draft of the extent of the increased powers desired in matters of quarantine, compulsory notification of contagious diseases, and other sanitary matters within each State, neglected or refused by local boards, which formula may be expressed in a bill and laid before each State Legislature for passage?”

Dr. C. L. ALLAN, of the State Board of Health of Vermont. On the proposition by the Provincial Board of Quebec, “Powers which Provincial and State Boards should have over local boards,” I would say, Vermont is young in sanitary affairs, although its representatives may be old in years. I came here to learn, because I want to know what should be known and what to recommend as amendments to our laws in regard to this matter. We have no local boards in counties, and I am desirous to hear discussed this proposition proposed by Quebec and also that proposed by the State Board of Vermont. I have scarcely any ideas on the subject and I want to know what the conference would advise as to the authority of the State Board over local boards. In our State we have no authority whatever over local boards. I would like to know respecting the duties of local boards and State Boards.

Dr. ORME. This is a vital question with us. For a good many years we have tried very hard to get a complete organization of local boards in every municipality and township, and particularly during the late prevalence of small pox. However, before discussing this matter further, I should like to hear the opinions of others on the subject; because this is one of the most important questions in our sanitary work.

During the past two or three years several instances have occurred in my State, showing the need of legal authority under which the State Board of Health could exercise control over local organizations or, in their absence, could go ahead and do the work itself. On one occasion, in one of our counties, there were several deaths from small-pox before anything was done, and then, upon a telegram being received by the secretary of the State Board, he went to the county and compelled the organization of local boards of health. Our State Boards cannot accomplish this work satisfactorily without the organization

of these local boards of health in every community. We want a law passed by our legislators to compel them to make regular reports to the State Board, and especially to report promptly every case of contagious disease.

If any State has a system of laws which have been shown by practical working to be thoroughly efficient, we should like to adopt them in California, and it would be well for them to be adopted by all the States.

Dr. H. B. BAKER, of the State Board of Health of Michigan, made remarks somewhat as follows: I have very pronounced views upon that point. I think our State Board was the first one organized on the plan which I recommend. Several have been constituted on this plan since. The idea upon which it is based is that of local self-government. The local boards of health should be made strong, and in the highest degree capable of performing the duties which local boards should perform. To have the State Board of Health perform a duty of a local board, seems to me very much like having a general officer in the army carry a musket. I believe that the State Board should collect from every local board all the important facts which are developed in their experience, and supply to each local board the results of the combined experience. As an instance of such work, we have in our State about fifteen hundred local boards, and in 1886 their reported experience with diphtheria was compiled by the State Board of Health, and the results were exhibited in a diagram on a single page, showing at a glance the importance of restriction and disinfection in that disease. We supply these diagrams, together with circulars of information as to the best methods for the restriction of the disease, to every locality from which diphtheria is reported; and we have no doubt but that the local boards are thereby greatly aided in their work.

In our State, the township officers are a local health board, and they elect a medical health officer whenever that is possible. In that way we have a board in each township, and generally a physician as health officer.

It seems to me that in a State where the laws do not yet provide for efficient local boards of health, the first duty of the State Board of Health is to enlighten the people and get them to organize a board of health in each township. By having a local board in each township, and making the local government the board of health, it can be appealed to at once by any resident and informed directly by the State Board whenever occasion requires, and these local officers become active agents in sanitary work in each township and they do it thoroughly and well; but if the local work were left to the State Board, the calls would be so numerous and the territory so large that it could not be properly done. By having township boards the people

are educated in sanitary affairs more generally than if there were only State and county boards.

Dr. HEWITT, Secretary of the State Board of Health of Minnesota, said: Our Board is the head of the sanitary organizations of the State. We have a sanitary code under which the local boards and the State Board work in thorough coöperation and with a well-arranged system of interdependence. We have over 1,600 local boards of health in direct and constant communication with the State Board. About 200 are for cities and villages having a common organization, so arranged that the members serve three years each, but go out so that there are always a majority of old members in the board. The chairman and executive officer must be a physician. The township boards (we have over 1,300) are the township supervisors and the chairman is usually the executive officer. Health officers of villages and cities, and township clerks, collect the returns of births and deaths, sending them monthly to the secretary of the State Board, who publishes a resumé of them the next month after their receipt, for general information. All local boards have the same powers, and in emergency, two or more, as need be, are required to act together with the State Board. Our boards are responsible for infectious diseases of men and animals, and enforce notification of infectious diseases, which they in turn report immediately to the secretary of the State Board. They control offensive trades, and have the oversight of water supply and the correction of anything which they find to be a nuisance or cause of sickness. The distribution of work and responsibility is so fairly divided that there never has been any conflict between the local boards and State Board, but a mutual progress which has made sanitary progress steady and satisfactory.

On motion of Dr. Orme, of the State Board of Health of California, the resolution offered by Dr. J. M. Taylor, of the State Board of Health of Indiana, was referred to the standing Committee on Laws.

Adjourned until 7.30 p. m., standard time.

EVENING SESSION, 7.30.

At the opening of the session the chairman stated that the matter before the board was the questions proposed by the State Board of Michigan: "What is each State Board of Health doing to advance sanitary science?"

(a.) By the collection of statistics of deaths and their causes.

(b.) By the collection of statistics of sickness.

(c.) By the collection of statistics of meteorological conditions coincident with sickness and deaths.

Discussion of the subject was limited to fifteen minutes for each State.

A roll of the States was called, and California answered by Dr. Orme as follows:

I should have preferred it if you had first called on one of the eastern States, which perhaps have had more satisfactory experience than we of the far west

In regard to the collection of statistics of deaths and their causes, our State Board of Health is greatly in need of a more efficient system; our State being so large, and in many sections thinly populated, having an area of territory larger than the New England States and New York combined, it is difficult to get full returns from all the counties, owing to the absence of local boards. But we make a collection of vital statistics as complete as can be obtained.

We endeavored, at the last session of our Legislature, to have a law passed not to permit the burial of any person without a certificate of death, giving the cause, signed by a properly authorized officer. If such a bill had been passed, we could make our returns more complete. At present only the larger cities require certificates of death; in other places a person can die and be buried without the health authorities hearing of the death, much less the cause. I hope that our next Legislature will pass the law we desire, making it compulsory all over the State to obtain a certificate of death before the burial of any human body.

In regard to the "collection of statistics of sickness," I will state that postal cards are sent out to our correspondents, who make monthly reports; so that at any time, when any contagious disease makes its appearance, we are promptly notified.

In regard to the "collection of statistics of meteorological conditions coincident with sickness and death," I would say that within the past year we have published monthly reports of the meteorological condition of the whole Pacific coast, and we hope, in the course of time, to make these reports more complete. Then from a comparison of these reports it can be ascertained what connection, if any, exists between the meteorological conditions and any particular disease.

In the monthly circulars issued by our State Board, we endeavor to give all the information possible. California wants to be in the advance, in the front rank, in the matter of sanitation: and we are here for the purpose of learning what has been done and seeing what can be done.

At the next session of our State Legislature we will have several bills introduced which, if they become laws, will be of great benefit to us and place us far in advance. We are trying to educate our people on sanitary matters, so that they will see the importance and necessity of these laws and force our legislators to do their duty.

Illinois, Dr. Rauch. I do not know that I have anything special to say: my quarterly report is here and you can see it. We have just commenced sewerage from East St. Louis, and that is one of the most important matters we are doing, but we are going to push the local san-

itation of the city. In fact, I have nothing to say outside of the last quarterly report.

Iowa, responded through Dr. Lewellyn. I arranged to bring the secretary of our board for the purpose of answering just such questions, so I did not take any special pains to prepare myself. Unfortunately for us he seems to be absent just at this time. We have ever since the organization of our board made it a special point to make collections of the statistics of deaths and their causes, and we have had a great deal of difficulty in organizing our board, but we are getting in very much better shape and our reports are very nearly correct and we can rely upon them. We have a very thorough organization throughout the State of local boards of health. The health officer who usually makes the report, and quite promptly, is a physician and can be relied upon; we get reports of deaths and births and special mention is made in the reports as to the health. We also distribute what sanitary knowledge we can in that way: it is, of course, comparatively new work but we feel that we are doing something.

We are collecting meteorological statistics in the same way, and though our organization is not perfect we are doing something. By our law the births and deaths are reported to the county clerk and then reported to the board. The condition of health is reported directly to the secretary of the State Board and these reports are embodied in the bulletin that is intended to be sent to all local boards of health officers.

The President said that the order of business would have to be suspended, as the time had arrived for the special business to be transacted, to wit: The election of the committee proposed in the resolution of Dr. Hewitt.

On motion the special order of business was postponed until the subject under discussion should be disposed of.

Kansas, Dr. Welch. Mr. President, as to what Kansas is doing to advance sanitary science I will say that three years ago the Legislature passed a law creating a health board in the State; that board organized and promulgated rules for the government of local health boards. The law itself created county health boards and made the county commissioners the local health officers and they appoint whom they please from the medical men in the county to be the local health officers, *ex officio*. The board has been holding for two years health sanitary conventions for the purpose of trying to educate the people to an appreciation of the health laws of the State and to educate them so that they will give us more effective laws and thus enable the board to do better work.

As to the collecting of statistics of death the law itself requires physicians, under penalty, to report deaths and their causes. These reports go to the local health officer and he makes his report to the secretary of the State Board of Health.

Relative to the collection of the statistics of sickness, that is very uncertain. A physician may report or may not, there is no law requiring them to report to the State Board of Health.

As to the meteorological condition coincident with sickness and death, I do not know as we are doing anything special in regard to that.

Dr. Schenck being present can probably give fuller information. The State Board of Health has appointed a committee to draft a law to enable the board of health in our State to execute its rules and regulations, and that law has been submitted to the different organizations or societies in the State for them to adopt or make suggestions, and I think within the last ten days every one of them has endorsed that bill.

Dr. SCHENCK. As Dr. Welch has said, we are making progress. I remember when we first commenced our work in Kansas, I wrote to Dr. Borlidge that in the course of twenty years we expected to do something, but we are getting along faster than that. State sanitary conventions are doing a good work and we are educating the people and we have great hopes that the coming Legislature will give us a law whereby we can compel the reports of deaths and births and the different kinds of sickness in a more certain and rapid manner.

In regard to the registration of physicians we have not succeeded in having the law enforced, but the most of the physicians in the state are in perfect accord with us on this subject and we shall probably have that law remedied shortly.

Kentucky, Dr. McCORMACK. Our law relating to vital statistics is so defective that it is practically a dead letter. All physicians and midwives are required by the law, to which proper penalties are attached, to report all births and deaths to the county clerk, but as we have had no efficient law regulating the practice of medicine, satisfactory returns have rarely been made. A recently enacted medical registration law will go into effect at an early day and we hope to be able to make a better report in this regard in the future.

Michigan. Dr. BAKER. The collection of statistics of deaths and the causes thereof was formerly in the hands of the secretary of the State Board of Health. That supervision has been done away with under the directions of the secretary of state, and the deaths are collected under a very imperfect law. The supervisors go about and ask for the deaths that have occurred during the preceding calendar year; they go around in April, consequently a little over a year has elapsed since the occurrence of the deaths in the first part of the year for which the return is made, and on account of the lapse of time about one-half of the deaths are omitted. We have reason to believe from the statistics obtained in that manner, compared with the statistics collected by the United States Marshall for the United States census, that about one-half of the deaths are not reported. The half which

are reported enable us to give a fair estimate of the relative proportions of the sexes at the various ages, and, perhaps, the proportion of deaths from each specified cause; and for those purposes are perhaps nearly as useful as if we had them all. But of this we cannot be certain.

The state board of health tries to advance sanitary science by beginning where the state department leaves off, utilizing not only the statistics collected by the State of Michigan, but also those collected in other states and counties in the studies relative to the causation of pneumonia and of other diseases.

With reference to the statistics of sickness, we get very satisfactory reports on postal cards, which we have prepared and send to the leading physicians in every part of the State.

For the collection of statistics of meteorological conditions we have in Michigan about thirty points of observation, and the observers have been in service for a number of years. Generally the observations are taken three times a day, at seven A. M., two P. M. and nine P. M., and in many places the observers have registering instruments so that they get quite an accurate, continuous record, and a record of highest and lowest temperatures.

Ohio. Dr. JONES. The State Board of Ohio has been in existence about two years and I can speak of about the same condition you have in Kentucky. The collection of vital statistics is made through the Secretary of State. We have just got a bill through the Legislature creating local boards which makes about five hundred points to keep track of. We have now about four hundred correspondents who report diseases; we have probably an average of from eighty to ninety reports a week.

In regard to the collection of statistics Dr. Probst the Secretary of the Board is here and can tell you more about it than I can.

Dr. PROBST. I do not know that I can add very much to Dr. Jones' report. The State Board is given supervision of the collection of the vital statistics of the State. The laws regulating this collection were made prior to the board's organization, and have not been changed, consequently the work remains where it was—in the hands of the Secretary of State. We receive reports from local boards of health (where these collections are made) of deaths and their causes; we get them from the larger cities and most of the larger villages, representing in all something over a million inhabitants. These reports are published in tabular form and distributed.

The collection of statistics of sickness, as Dr. Jones has stated, is by means of physicians who act voluntarily as correspondents. This is very unsatisfactory, as we do not get as many as we want, and they are not regular; out of four hundred correspondents, not over seventy report each week. We combine these statistics in the shape of a health bulletin and send this to correspondents, health officers and others.

In the collection of meteorological conditions we are doing something and work has been commenced which promises to bear good results. We have forty one observers who send us regular reports, which are published in connection with the statistics of deaths as collected from the local boards of health.

I have here some charts relating to this that we have had prepared and will pass them around for your inspection.

Pennsylvania, Dr. LEE. The great State of Pennsylvania, like the comparatively new State of California, as we have been told, is in such a condition that a man may die and be put under ground, and no more official note taken of it in the rural districts than if he was a dog, and not as much as if he was an Alderney bull, for in the rural districts considerable pride is taken if a choice bull dies; there is a note made of it.

There has been no meeting of the Legislature since the last report, consequently I am not able to report anything additional. The only registration which is made in the State of Pennsylvania, is that of the medical practitioners, and those are made to the county authorities who are not compelled to report to any State authority, consequently there is no State registration whatever.

South Carolina, Dr. EVANS. We have a registration law which has been in operation for several years, which requires every practitioner to register with the county clerk and show his diploma, and makes it a penalty to practice without it. For the last seven years every practitioner has been obliged to get a license before he can practice, but there was a little omission made in the law which has been remedied within a few weeks, in reference to statistics.

We have in the city of Charleston statistics gathered up with a great deal of care, covering sickness, meteorological conditions and so on.

Vermont, Dr. ALLAN. I would say in answer to the first question, it has been now thirty years since we have had the registration of births, deaths and marriages; the statistics are collected once a year,—in February, and reported to the town clerk who makes a note of them; then the report is sent to the Secretary of State who makes a report of the registration of the births and deaths and marriages that occur in the State.

There has been no collection of statistics of sickness and no statistics of meteorological conditions.

Wisconsin, Dr. REEVES. I wish I could tell a good story in regard to the collection of statistics. Wisconsin has a law which requires all physicians to report births and deaths, but it is a law which has stood upon the statute books for a good many years. Physicians have been required to make these reports and have been doing so to a limited extent, but within the last two or three years there has been more or less activity and the number of reports has increased very largely. We do not regard these reports as of any great sanitary value. I do

not believe that any statistics of births and deaths are of any value unless collected regularly under authority of law. These statistics are published by the Secretary of State.

As to meteorological observations we have reports from the Government observers and from a number of private observers. The statistics of sickness are very indefinite, except in cases of small-pox and scarlet fever, and the diseases which are considered contagious: we do not consider them of much value. In cases of contagious diseases the reports are of considerable accuracy, both as to the kind of diseases and the number of cases and number of deaths resulting from those diseases.

Ontario, Dr. BRYCE. I have not very much to say in connection with these questions, as the most of you are aware we have had a registration of births, marriages and deaths, and while they are not directly under the supervision of the board of health, that department has charge, and has taken a great deal of care in comparing them. I think our statistics regarding deaths, births and marriages are as complete and as accurate as any.

In reference to the collection of statistics as to sickness, as reported to us by the medical practitioners, there is not such a regular report as I could desire. I endeavored last year to reduce the work to a minimum by asking that a report only of contagious diseases be made and for practical purposes; it seemed to me that was all that we wished certainly to know. The medical men have been reasonably prompt in responding.

With regard to meteorological conditions in the Province we have everything that is desirable: this has been in thorough operation for some thirty years and enables us to compare the statistics of meteorology with the dates coincident with sickness and death. We have been trying to get our organization in perfect order and are pushing the work as far as possible.

The PRESIDENT. The subject having been disposed of, the special order of business, namely, the election of the committee provided for in Dr. Hewitt's resolution is now in order.

On motion of Dr. Rauch the committee was increased to seven.

On motion, the chair was authorized to appoint a committee of three to place in nomination members for this committee.

The chair appointed Drs. Baker, Reeves and Lewellyn.

The committee having retired the convention then took up the proposition by the State Board of Health of Pennsylvania, viz: "What should be the attitude of state boards of health towards leprosy," upon which Dr. Lee read the following paper:

What should be the Attitude of State Boards of Health towards
Leprosy ?

DR. BENJAMIN LEE, of Pennsylvania.

Can the leper change his spots? No more than the leopard can. Can any one else change or remove his spots for him? All history from the times of the great author of Leviticus down returns a sad and solemn negative to this question also. The knife may cut out the germinating cancer. A wisely directed regimen may induce the encystment of the tubercle. Appropriate medication may stay the devouring ravages of the disease which it is a shame to mention. But for leprosy no method of healing exists. Medical science and the *Vis Medicatrix Nature* stand side by side mute, with folded hands in its horrid presence, while the wretched, hopeless victim slowly falls to pieces like a crumbling ruin under the devouring tooth of time a loathed and desolate outcast. Loathed, because he becomes an object so abhorrent that pity's self turns from the sight in unwilling disgust; desolate, because the unfailing, unwavering testimony of the ages is that he who abides with him will himself become a like object of dread and dire decay. More than this his habitual abiding place soon becomes infected with the contagion of his disease whose germs flourish and propagate even upon walls of stone. The horrid doom of Tirzah and her mother in the romance of Ben Hur is no mere fancy sketch.

Leprosy always has been incurable. Leprosy always has been contagious. Leprosy always has been infectious. Now, is it reasonable to suppose that a disease germ which for four thousand years has an unbroken history, which for four thousand years has had an unchanging character, will suddenly lose its essential characteristics? That transportation across a few thousand miles of ocean into a climate whose therm-norm is somewhat lower is going to deprive it of its contagious and infectious qualities? Have we any analogy in nature for so astonishing a transformation? I certainly know of none. What then has led to the wide-spread incredulity in the medical profession as to its contagiousness in this country and in other temperate climes? Three reasons, viz:

First. The well-known fact that while its contagion is sure it is extremely slow.

Second. The fact that the germ does develop more slowly and sluggishly in low temperatures than in high. But give it time and depend upon it, it will develop as surely and as relentlessly as under a tropical sun.

Third. The fact, not so generally recognized, that there are cycles in disease. That for a period of years greater or less, owing to occult

conditions not as yet understood, certain vegetable germs, seeds or spores may become less active and fruitful and then for a series of years or ages regain their pristine fertility. We are now in a cycle it may be of diminished activity of the germ of leprosy. Let us suppose that a case here and a case there is allowed to wander at will over the country scattering the seeds broadcast wherever it goes, when the favorable period for the germination of these spores arrives what a frightful harvest will death the reaper have to glean.

A recent number of a well-known medical journal says in its editorial column: "Until a single authentic instance of its communication by contagion in this country can be adduced it is the height of folly to demand their separation from their fellows," while in the very same issue it records the following thoroughly authenticated case reported by Mr. Hillis, the superintendent of the largest leper asylum in the West Indies: "A shop-keeper at Demerara, whose business as contractor for provisions took him frequently to the asylum, became leprous. For at least ten years his wife remained free from any sign of leprosy. The case was well-known and Mr. Hillis had been frequently called on to explain with reference to this very person, how, if leprosy was in any way contagious, this man's wife escaped so long. In May, 1886, this woman came to him with well-marked symptoms of leprosy and was under treatment when he left the West Indies." Other cases are on record in which the period of incubation was nineteen and twenty years. It will not do to say that because cases of leprosy have existed for a few years in a certain community and no instance of contagion has been discovered, (I say discovered because the tendency of the leper is to conceal his malady, and he may succeed for a considerable length of time), that, *ergo*, leprosy is not contagious in that locality. This is an experiment which demands time, a long series of years, and, while it is being made, such precautions should be observed that should the result be in favor of the theory of contagion, numbers of lives will not have been sacrificed to it, nor centers of infection have been established in every center of population.

It is only theorizers and those who take cursory and distant glances at it who pronounce it harmless. All who have been in a position to study it practically for a lifetime unite in raising a warning voice against this dangerous delusion.

Daniellson and Bock who observed the disease in a climate even colder than our own gave the following as the mature result of their experience: "Our whole theory of lepra rests incontestably upon the sad fact that within the bounds where it commits its ravages it can be made harmless to the rest of the people only by isolation."

In the short space of forty years one-tenth of the entire population of the Sandwich Islands has become infected from two individuals.

Mr. Hillis, after twenty years' experience, thus formulates his conclu-

sion: "Wherever lepers are allowed to congregate and no attempt is made at isolation, other cases will in due course assuredly arise irrespective of hereditary tendency, peculiarity of diet or locality."

According to M. Besnier, a member of the French Academy of Medicine, leprosy, far from disappearing by degrees, is spreading rapidly. Since the extension of the French colonial possessions, soldiers, sailors, traders and missionaries have fallen victims to it in large numbers. He therefore, exhorts physicians in all countries to study the fell disease in order to find a means of counteracting its ravages, for it has active focuses of infection in every part of the globe.

Thoroughly substantiated cases of its transference by vaccination have been placed on record by Tilbury Fox and Erasmus Wilson. There is a curious tendency in minds which have not had a strictly logical training to give equal weight to positive and negative testimony. But as M. Besnier well says, "In a question of this kind a few positive instances of contagion count for more than an innumerable number of negative instances." From among a large number of positive instances which he cites I quote only such as have a direct bearing on the question as it concerns our duty from the fact that they have occurred in climates similar to our own. They are collated in the British Medical Journal, November 12 and 19.

In 1872 Dr. Hawtrey Benson showed to the Dublin Medical Society an Irish leper who had contracted the disease in the Indies where he had lived twenty-two years. For a year and a half this man's brother, who had only left Ireland for a visit to England forty six years before, slept in the same bed and wore his clothing. He became a leper and was presented to the same medical society. There was no leper in the family and there had been no leprosy in the British Isles for several centuries.

An inhabitant of Sagra established himself at Parcent about 1850. Leprosy was quite unknown there and the Indian who had the first symptoms of it did not know the gravity of his illness. He went to live with a friend and a little while after two cases of leprosy were reported. The friends of the first victims were the only ones attacked.

1. Betty MacCarthy, of Prince Edward's Island, was married, 1836, became ill in 1852, and died in 1864 of leprosy. Had five children. 2. *a.* Richard died of leprosy after twenty years illness. *b.* John died of leprosy after twelve years illness. *c.* Mike died of leprosy after ten years illness. *d.* William died of leprosy at twenty-one years of age. *e.* Mary died of leprosy after twenty years illness. 3. John Doyle, Mary's husband, died of leprosy after six years illness. 2. Two daughters of John and Mary Doyle died of leprosy. 1. John Brown, who nursed W. MacCarthy during his illness and washed and buried him after death, became leprous shortly after and died of this disease. 4. James Cameron, who married Betty MacCarthy's daughter Su-

zanna, had two children by her who were healthy. He was accustomed to sleep with Mike MacCarthy. In 1870 he presented true leprous symptoms and is now very ill.

Formerly, Dr. White relates, there were lepers in Louisiana. A hospital was founded for them after which the disease almost completely disappeared. No trace of it was found up to 1866, at which time it appeared in a woman, Madame Ourblanc, whose father originally came from the south of France. She died in 1870 leaving six children. Leprosy appeared in the second son in 1871, in the eldest and fourth sons in 1872. The eldest daughter died of an acute disease, the second became a leper. All of them lived in their mother's house. In 1875 a nephew of the woman living eight miles away became leprous. In 1873 leprosy appeared in a young woman not related to this family, but who had nursed Madame Ourblanc in the last period of her illness. Finally it was developed in a young man who had lived some miles from the residence of the Ourblancs, but who had often slept with the fourth son of the family in 1875. Other cases of leprosy afterwards developed in the vicinity.

The latest authoritative utterance on this subject is that of Prof. von Wahl, of Dorpat, in a little brochure on "Leprosy in the Baltic Provinces," prepared for the information of health officers in Russia. The result of his study of the disease in that cold climate is that it is undoubtedly both contagious and infectious, although he inclines to the belief that an ulcerative process is necessary to set free the lepra bacillus.

I cannot overlook one argument which has been advanced by those who are disposed to dally with this serious danger. It has been said that we do not isolate persons infected with syphilis and therefore we should not deal more harshly with those suffering from leprosy. This is equivalent to urging that as we have one foul, contagious disease, which is in the main curable, and the mode of propagation of which is accurately known, firmly fastened upon us and as owing to the peculiar method of its propagation we have not yet arrived at a sufficiently high state of civilization to enable us to isolate those infected with it, therefore, we should make no attempt to prevent the spread of another infinitely more loathsome, contagious disease which is incurable, the exact mode of propagation of which is as yet unknown and to the isolation of which there exists no such obstacle. The argument I conceive needs no other answer than its clear statement.

To our brethren of the Pacific coast this subject comes home more pressingly than to us of the east. Mongolian immigration cannot fail to bring along with its thousands of healthy, hardy, willing workers many an individual in whose blood lurks this lethal taint.

I entertain no doubt that the sentiment which is taking possession of the minds of the profession in California will rapidly become the dominant sentiment with us. And I therefore offer for the considera-

tion of the conference the following resolutions based upon the recommendations of a committee appointed by the California State Medical Society, of which Dr. W. F. McNutt, of San Francisco, was chairman, first premising that the fourth resolution or clause which might otherwise seem forced and unnecessary is founded upon the discovery of Dr. Arning that the bacillus of leprosy seems to multiply in the bodies of dead lepers months after they have been buried.

Resolved. That it is the sense of this conference,

First. That a strict quarantine should be established against leprosy, and that all lepers attempting to enter this country should be returned to whence they came.

Secondly. That those already here or who develop the disease here should be rigidly segregated.

Thirdly. That it is eminently desirable that entirely distinct hospitals should be provided for such cases; and,

Fourthly. That the bodies of deceased lepers be cremated or buried in lime, and their personal effects be destroyed by fire after being treated with powerful disinfectants.

Dr. Lewellyn moved that the discussion be laid over for another year and that the subject be referred to a special committee.

Dr. Orme, of the State Board of Health of California, said: I rise to second the motion. I was on the Committee of the California State Medical Society which made the report referred to by Dr. Lee, and the conclusions that the committee arrived at have been correctly stated. We have had leprosy in San Francisco; we have also had a few cases throughout the State, but it is generally confined to Chinese immigrants. I know of several cases. It has been the policy of the State to send these Chinamen back, not allowing them to land. Several years ago there were ten or a dozen sent back to China by the municipal authorities at San Francisco. This is one of the evils of Chinese immigration.

As to the question as to whether leprosy is hereditary as well as contagious, I would say that the weight of evidence seems to be that it is both contagious and hereditary.

The case of the priest who lived for many years among the lepers on the Island of Moloki without contracting the disease has been cited as the principal argument against the view that leprosy is contagious, yet within the past twelve months it is positively known that he has contracted leprosy in its worst form.

On a call of the motion, the paper was referred to a committee of three, consisting of Drs. Lee, Bryce and Hoeg, of Wisconsin, to report their conclusions at the next meeting.

The nominating committee reported as follows: Dr. J. H. Rauch, Illinois, chairman; Dr. H. B. Baker, Michigan; Dr. C. N. Hewitt, Minnesota; Dr. J. N. McCormack, Kentucky; Dr. J. G. Simmons,

South Carolina; Dr. James Simpson, California; Dr. P. H. Bryce, Province of Ontario, Canada, and Dr. Benjamin Lee, Pennsylvania.

On motion, the report of the committee was accepted.

On motion of Dr. Lewellyn, the secretary was instructed to cast the vote of the conference for the names nominated by the committee.

On motion of Dr. Baker, the President of the Ohio State Board of Health, Dr. John D. Jones, was added to the committee.

The secretary reported the duty of casting the ballot of the conference for the names, and the same were declared elected.

On motion, the conference adjourned until ten o'clock Monday morning, May 7, 1888.

MORNING SESSION.

MONDAY, May 7, 1888.

Dr. LEE, of the State Board of Health of Pennsylvania, said: I ask permission of the Conference to move a reconsideration of the resolution which I offered in regard to quarantine stations.

Dr. Rauch seconded the motion, and the resolution was reconsidered.

Dr. LEE. I move to amend the resolution by adding Philadelphia, and we also urge upon Congress the passage of a bill to establish a National Bureau of Health.

The amendment was carried.

The resolution as amended was then placed before the conference and was carried.

The committee on the subject of isolation hospitals and other discussions, reported as follows:

To the President and Members of the Conference:

GENTLEMEN: Your committee appointed to report on the subject of isolation hospitals and other discussions thereon, begs leave to report as follows:

1. That the principle of the establishment of isolation hospitals, as a preferable method to placarding houses and quarantining families, has been fully confirmed, both by general experience and the experience of members of the conference.

2. That the practical difficulties—First. Of expense of establishment. Second. Of the removal of persons suffering from dangerous infectious diseases thereto are not so serious in practice as at first sight would appear, since the simple character of the isolated buildings required in many cases, for handling first cases and the discrimination which ought to be exercised by medical health officers in the removal of persons, will be found to largely remove what in many cases appeared insuperable difficulties.

3. That it is most desirable that the position which all our State and Provincial Boards should take is that of urging, from the stand-

points of duty and economy, their local boards to establish places of isolation for those cases of diphtheria, etc., which in their opinion will be dangerous to the household and the community.

4. That contemporaneously with education along the above lines, State and Provincial Boards ought to press for such legislation as will place them and their local boards in a position to enforce such isolation as the circumstances may demand.

All of which is respectfully submitted.

P. H. BRYCE, *Chairman*,
H. S. ORME.

On motion of Dr. Thompson, discussion of the report was postponed.

The chairman stated that the question proposed by the State Board of Missouri, "The subject of railroad travel by persons knowingly affected with dangerous communicable diseases and the proper means of restriction of such travel, legislative or otherwise; what penalty and how imposed for such grave offenses against public health and safety," was before the conference.

On motion of Dr. Rauch, the discussion upon the question was postponed.

The chair stated that the proposition of the State Board of Kansas, "The influence of medical education upon public health," was the next subject for discussion.

On motion, the subject was postponed.

The chair announced that the proposition of the State Board of Vermont, "What sanitary regulations are necessary in and about country residences?" was open for discussion.

Dr. Allan, of the State Board of Health of Vermont, addressed the conference briefly on the subject, after which further discussion was postponed.

The chair stated that the proposition of the State Board of Health of California, "In the event of cholera reaching America, can it be prevented from becoming an epidemic? If so, how?" was before the conference.

Dr. LINDSLEY, Secretary of the State Board of Health of Tennessee, said: I consider this an important matter for the American people to look after. I remember the epidemic of 1833 with perfect distinctness; servants in my father's family took the cholera in the morning and died that night. I remember the epidemic of 1849, being then a medical man, with more distinctness, and also that of 1854 and again in 1866. I most emphatically agree with the statement of Dr. Rauch; that it is an epidemic that can be readily stopped and by the same means that we would resort to in diphtheria or small-pox; there is no mystery or trouble about it, it is simply isolation and disinfection. It is very easy to say that cholera is a National pestilence and that it can be prevented, but it takes money to do this, and if the Congress at Washington would pay one-tenth of the interest to the subject

which it pays to the animal industry, cholera would be forever shut out of this continent.

The Committee on Constitution and By-laws reported as follows:

CONSTITUTION.

Name.

The name of this association shall be "The National Conference of State Boards of Health."

Memberships.

The members of this conference shall be the executive officers or other delegated representatives of the State Boards of Health of the United States and of the Provincial Boards of Health of the Dominion of Canada.

Dues.

Each Board represented shall pay to the treasurer of the conference five dollars per year.

Votes.

Whenever demanded by two delegates, any question shall be determined by a vote by States, each State being entitled to one vote.

Officers.

The officers of this conference shall be a president, secretary and treasurer.

The duties of each officer shall be those which are usually performed by such an officer; and collectively the officers shall be an executive committee to make suitable provisions for meetings of the conference, for programme, etc.

Parliamentary Rules.

Cushing's Manual shall be the guide to parliamentary action, in case of question.

Amendment of this Constitution.

Notice of the nature of any proposed amendment of this constitution shall lie upon the table from one annual meeting to another before coming to a vote. Such notice having been given, this constitution may be amended at any regular meeting of the conference, if a majority of the States and Provinces represented vote in favor of such amendment.

Dr. Rauch moved that the report be received.

Motion carried.

Dr. Thompson moved the adoption of the report.

Motion carried.

The Committee on Codification of Health Laws asked for further time in the following:

MAINE STATE BOARD OF HEALTH,
AUGUSTA, August 24, 1888.

Dr. C. O. PROBST,

Secretary National Conference of State Boards of Health :

DEAR DOCTOR: I regret very much that as chairman of the Committee on a Codification of the Health Laws it has not been possible for me to spare the necessary time for that work. If the work could be done by some person who had leisure to do it well it would be interesting and useful, but it will be utterly impossible for me to claim the time from my other duties. I am therefore obliged to report that no work has been done by the committee.

Yours truly,

A. G. YOUNG, M. D.,
Secretary.

On motion of Dr. Orme the committee was requested to prepare for publication a report of work done since the Toronto meeting.

The Committee on Infectious Diseases asked for further time.

Further time was granted.

The Committee on Vital Statistics was called for.

Dr. Baker asked for further time which was granted.

ELECTION.

The chair stated that the next thing in order would be the election of officers for the ensuing term.

Dr. LEE moved that Dr. McCormack be unanimously declared President of the conference for the ensuing year.

Carried unanimously.

Dr. BAKER. I move that the present acting secretary (Dr. Probst), be declared unanimously Secretary of this conference.

Carried.

Dr. BAKER. I offer the following resolution of thanks, viz :

Resolved, That we tender to Dr. John D. Jones, President of the Ohio State Board of Health, and to Dr. Stanton, health officer of Cincinnati, a cordial vote of thanks for the very satisfactory local arrangements for this meeting of the conference and for many courtesies extended to us.

Dr. BAKER. I offer the following resolution relative to C. A. Lindsley, M. D., secretary.

Resolved, That the thanks of this conference are given to Dr. C. A. Lindsley, of Connecticut, for his useful work as secretary of this conference, and our heartfelt sympathy with him in his recent injuries, from which we all wish him speedy recovery.

Carried unanimously

Dr. JONES. I move that Dr. Baker be made Treasurer of the conference by acclamation.

Carried unanimously.

Dr. LEE, of Pennsylvania, offered to print the report of the proceedings of the conference, which offer was accepted with thanks.

On motion of Dr. Jones the place of next meeting was left to the Executive Committee to determine.

Dr. LEWELLYN. I move that the subjects laid over for discussion be left to the Executive Committee.

Carried.

Dr. BAKER. I move the Committee on Quarantine have power to fill vacancies in committee.

Motion carried.

Dr. THOMPSON. I move that when the committee make a report they also make a report as to expenses, and that it be distributed between the various boards represented at the conference and that we recommend its payment.

Dr. REYNOLDS. My idea is to have the Executive Committee return the expenses and that the Executive Committee shall report to the different boards and make an assessment as usual for expenses.

The PRESIDENT. It occurs to me that the best plan is to report the expenses to the Executive Committee, and that the Executive Committee assess the amount upon each state board, if that is the motion I will put it.

Dr. THOMPSON. I will accept that.

Motion carried.

The conference then adjourned.

